

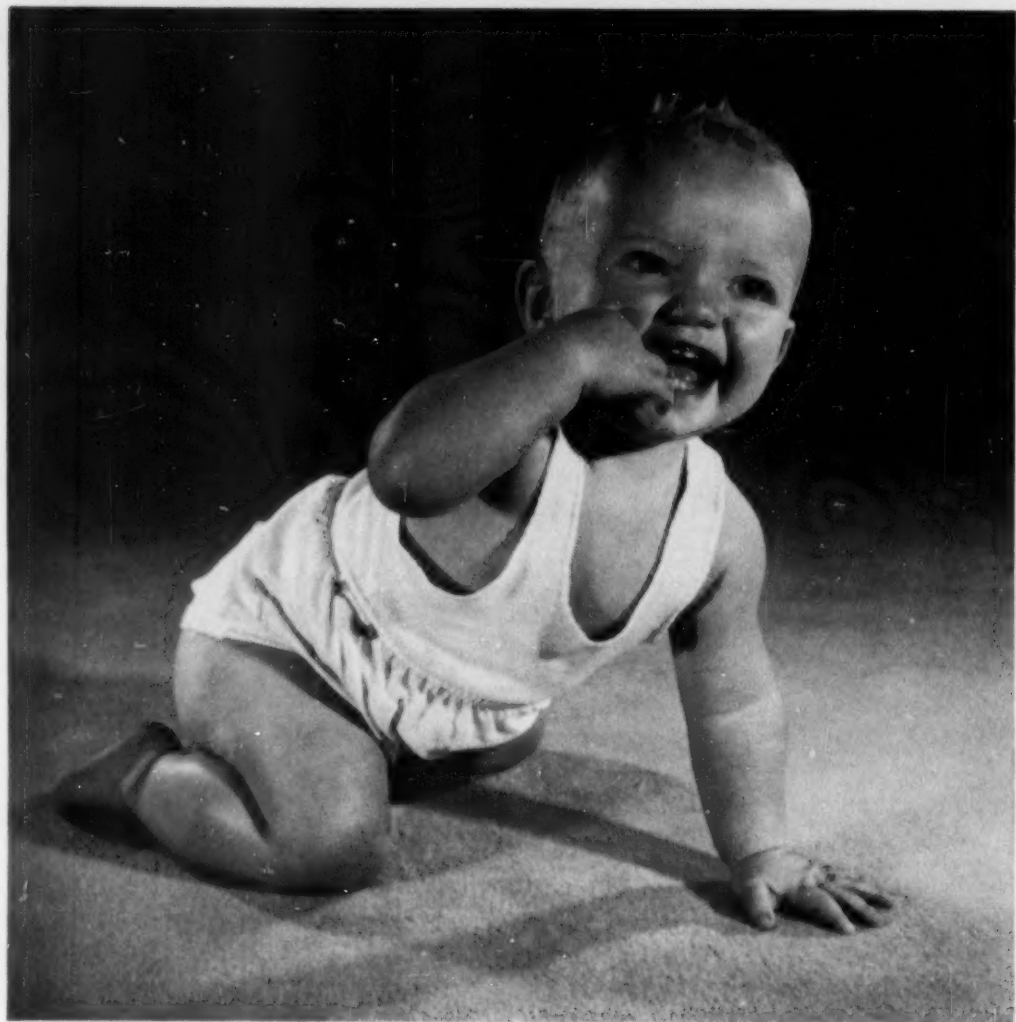
American
PHOTOGRAPHY

NOVEMBER 1938
THIRTY-FIVE CENTS
CANADA FORTY CENTS

•SERVING PHOTOGRAPHY SINCE 1889



SPEEDLIGHT: FIRST IN A NEW SERIES
"HOW TO CHOOSE IT!"



Stellar Performer!

In this case three can take a bow for superb performance. The baby, the photographer, and Ansco Indiatone Paper.

Indiatone is the perfect complement to the perfect negative. Versatile, too! It gives you excellent keeping qualities and stability—and an amazingly wide latitude that allows development over a range extending from 45 seconds to 4 minutes!

Yet *quality* is never sacrificed. Indiatone responds beautifully to development, yielding warm olive- to brown-black enlargements that are a standout in *any* salon! And Indiatone gives strikingly attractive reddish-sepia images in Ansco Liquid Flemish Toner. For best results, develop Indiatone in Ansco Ardol Prepared Developer—laboratory-packaged for your protection. **Ansco, Binghamton, New York.** A Division of General Aniline & Film Corporation. "*From Research to Reality.*"

INSIST ON ***Ansco*** INDIATONE PAPER

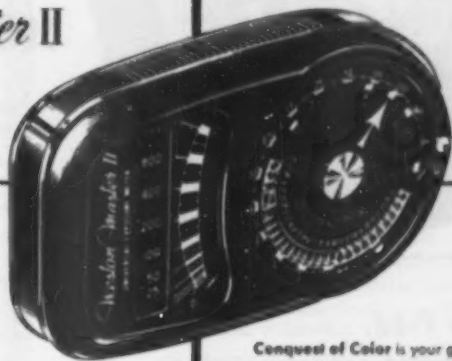


Master of Color

THE WESTON *Master II*

EXPOSURE METER

The Meter Most Photographers Use



Color is a challenge—to the artist, to the model, to the photographer!

You can meet this challenge! To make color do your bidding requires precise exposure control. The sensitive Weston gives you this control—not only of the middle tones, but of highlights and shadows as well. With accurate exposure assured, you'll thrill to the glorious rendering of each subtle tint and shade—in rich, living color.

Conquest of Color is your gift when you give a Weston. The Master II, above, meets the most critical photographic needs. The Cadet provides traditional Weston quality at lower cost. See both models at your photo dealer's—men.

WESTON ELECTRICAL INSTRUMENT CORP.

606 Frelinghuysen Ave., Newark 5, New Jersey

If you have only 2 hands



this is a BIG help!



Also new T-68. Automatic timing for developing, washing, fixing, and drying. 40-minute range. Buzzer signals end of cycle as current is cut off \$16.50*



Automatic

INTERVAL TIMER

(TYPE T-48)

- turns enlarger or printer on and off . . . automatically.
- lets you "mass produce" prints quickly, accurately; resets for repeat exposures . . . automatically.
- leaves hands free for dodging, ticks each second, shuts off at proper time . . . automatically.
- gives perfect timing for color work . . . automatically.

So, if you have only two hands, see the G-E Automatic Interval Timer at your dealer's today! **\$13.95***

General Electric, Schenectady 5, New York

*Fob Traded

Made by the makers of G-E exposure meters . . .



TYPE PB-1
"THE METER
WITH A MEMORY"



TYPE DW-68
"3 METERS IN ONE"

GENERAL  ELECTRIC

American PHOTOGRAPHY

• serving photography since 1889

INCORPORATING:

ANTHONY'S PHOTOGRAPHIC BULLETIN
(established 1870)

THE PHOTOGRAPHIC TIMES
(established 1871)

AMERICAN JOURNAL OF PHOTOGRAPHY
(established 1879)

THE AMERICAN PHOTOGRAPHER
(established 1879)

THE PHOTO BEACON
(established 1888)

AMERICAN AMATEUR PHOTOGRAPHER
(established 1889)

CAMERA NOTES
(established 1897)

PHOTO CRAFT
(established 1897)

PHOTO ERA
(established 1898)

CAMERA AND DARK ROOM
(established 1898)

THE PHOTO MINIATURE
(established 1899)

CAMERA CRAFT
(established 1900)

PHOTOGRAPHIC TOPICS
(established 1902)

THE AMATEUR
(established 1912)

PHOTOGRAPHER'S WEEKLY
(established 1912)

POPULAR PHOTOGRAPHY
(established 1912)

PHOTO TECHNIQUE
(established 1939)

NOVEMBER, 1950

VOLUME 44, NO. 11

Thomas E. Irvine, Publisher

George B. Wright, editor Alfred C. Schwab, managing editor

Franklin L. Jordan, F.R.P.S., F.P.S.A., editor, American Annual

Ruth Branger, editorial assistant, (Readers' Service)

Mel Hendrickson, business manager

CONTRIBUTING EDITORS:

Barbara Standish Samuel Grierson, A.R.P.S.
L. Whitney Standish, F.P.S.A. Herbert C. McKay, F.R.P.S., A.S.C.

CONTENTS

SPEEDLIGHT: HOW TO CHOOSE IT	15
<i>Andrew F. Henninger, in the first of a new series, writes with authority on the considerations for choosing electronic flash equipment.</i>	
SALON SECTION	20
<i>K. Pazowski, brilliant young Londoner, exhibits distinctive technique and creative outlook in the portfolio presented here.</i>	
THE SIX STATES EXHIBITION	36
<i>Arthur Siegel and Axel Bahnsen report on an interesting exhibit which may influence future salons.</i>	
HOW TO MAKE PANORAMIC PHOTOGRAPHS	43
<i>Roland J. Wolfe explains how simple it is to convert your equipment to this novel use.</i>	
COLOR AND HUMAN VISION	54
<i>Nicholas Ház, F.R.P.S., F.P.S.A., presents the facts about color you need to know to make outstanding slides.</i>	
EXHIBITION PRINTS AND HOW TO MAKE THEM	60
<i>Cecil B. Atwater, F.R.P.S., F.P.S.A., concludes his review of salons with some pointed advice.</i>	
SHORT FEATURES:	
Cutting Carbo Costs	26
Portable Background	35
Handy Folding Cart	43

THIS MONTH'S COVER

Electronic flash enables the user to capture peak expression, as our cover shot illustrates. No other data is available. (Courtesy, Anglo Corporation.)

DEPARTMENTS

Positive and Negative	6	Grierson's Wood in Edgewood	44
McKay's Notes from the Lab.	8	Considering Pictures	52
Editorial	13	Book Reviews	64
Pop Set	27	Salon Calendar	65
Notes and News	39	Editorial Briefs	66

Entire contents copyright 1950 by

THE AMERICAN PHOTOGRAPHIC PUBLISHING COMPANY
421 Fifth Avenue So., Minneapolis 15, Minnesota

AMERICAN PHOTOGRAPHY is published monthly by the American Photographic Publishing Company, 421 Fifth Ave. So., Minneapolis 15, Minnesota. Copyright 1950 and printed in the United States. Registered as second-class matter May 7, 1950, at the Post Office, Minneapolis, Minn., under the Act of March 3, 1879.

SUBSCRIPTION rates: \$2.50 per year in U.S. and its possessions, Mexico, South and Central America and Spain, \$3.00 per year in Canada, \$3.50 per year elsewhere. Single copy: 25 cents.

CONTRIBUTORS are advised to keep copies of all material submitted. Return postage must accompany material submitted if return of rejected material is desired. Unless otherwise specified, first magazine rights only are purchased, one-time publication for prints from American contributors. From contributors outside the U.S., all American publication rights are required unless other arrangements are specifically made.

INDEXED regularly in "The Reader's Guide to Periodical Literature" and "The Industrial Arts Guide."

Space Representatives:
Robert Edgell
104 East 40th St.
New York 16, N.Y.
John M. Prendergast
140 North Michigan Ave.
Chicago, Illinois



VETERANS don't miss the boat!

N.Y.I. offers you the best possible training for success in profitable photography! Your government wants to help you get ahead! In a few months your rights under the G.I. Bill will expire. Act now to cash in on the wonderful opportunity you are offered to build a sound future!

ALL your training expense—tuition, supplies, materials, etc.—will be paid for by the Veterans Administration. These Personal Attendance Courses are available with subsistence under the G.I. Bill (Public Law 346 and 18) to those veterans interested in photography as a profitable career.

ACT NOW BEFORE IT IS TOO LATE!

there's SECURITY in photography

All over the world—N.Y.I. trained photographers are successful in every important phase of photography. They reached the top because instead of wishful thinking they took ACTION!

LEARN BY DOING!

N.Y.I.'s world famous learn-by-doing teaching method has been successful for over 41 years. You quickly achieve the "professional touch" in Portrait, News, Fashion, Advertising, Retail, Illustration, Commercial, Natural Color, Old Coloring and Retouching.

NO FORMAL CLASSES!

You receive **INDIVIDUALIZED INSTRUCTION** from top-flight experts. You work with the finest professional equipment—in spacious studios and darkrooms with plenty of elbow room—in 20,000 square feet of working space. **THIS IS BIG-TIME PROFESSIONAL PHOTOGRAPHY—TAUGHT BY PROFESSIONALS!**

You can attend Day or Evening—you can specialize in one branch or cover the field. Our 41 years of experience offers you a time-proven opportunity in a field rich with the promise of **SECURITY . . . PHOTOGRAPHY!**

HOME STUDY

The N.Y.I. Home Study Course offers you a splendid opportunity to become an outstanding photographer! Each lesson is clearly printed, beautifully illustrated, substantially bound. You receive photographic training prepared by recognized authorities which is so clearly presented that you learn quickly!

DON'T DELAY!

SEND FOR FREE BOOK TODAY!

**NEW YORK INSTITUTE
of Photography**

10 WEST 33 STREET, NEW YORK 1

LEADERSHIP SINCE 1910

Send for FREE big book!

New York Institute of Photography
Dept. "78", 10 West 33 Street
New York 1, N. Y.

Please send me complete information regarding ☐ Resident Training ☐ Home Study Course

NAME _____

ADDRESS _____

CITY _____ State _____

POSITIVE and NEGATIVE

Dangerous Advice

Gentlemen:

I want to say "don't do it!" to something you printed in your September issue. In a column of "Suggestions for Photoflash," it was suggested that a way to cut down the power of a flashbulb for close-up fill-in work was to remove the reflector and shoot the bulb bare. While attending a picnic of the Agricultural Department's camera club, I shot a number of outdoor pictures of people, using flashbulbs to fill in the shadows. On each I left off the reflector and shot with the bulb bare right beside my right ear and eye. On about the twelfth such shot I decided to put the reflector back on. It was a good thing I did because the bulb exploded with a bang, scattering glass all over the landscape and imbedding splinters in the reflector. Powder burned the inner surfaces also. If I had not put the reflector back on, I would have one less eye today.

Instead of taking off the reflector to cut down the bulb's power, use your handkerchief. Some recommend draping it over the reflector but I find it always falls off this way, so I wedge it behind the flashbulb. This prevents the bright reflector from getting a chance to bounce back the light rays and cuts the power of the bulb in half.

Arthur L. Schoeni, LCdr.
Falls Church, Va.

Special Sub Rates

Gentlemen:

Do you offer rates for a group of subscriptions? The Convair Camera Club of which I am secretary is sponsoring a plant-wide (Convair) snapshot contest. Honorable mention winners of the contest, maximum 16, will be given a year's subscription to your magazine.

Mrs. L. S. Orvick
Fort Worth, Texas

Yes, we will give a 20 per cent discount on such group subscriptions. Many clubs have found that these subscriptions make fine awards for contests.

Zaragoza Salon

Gentlemen:

In regards to the Zaragoza Salon I thought it might be interesting to you to know that I've lost two sets of prints (1949 and 1948) sending to this salon. A friend of mine also lost his set in '49. They evidently never got there. Have you any other complaints against this salon?

Paul B. Miller
South Bend, Ind.

Thanks for the information. AMERICAN PHOTOGRAPHY has tried to cooperate with foreign salons in countries where there are exchange difficulties. If these salons are irresponsible, our readers should be so informed. Are there any other exhibitors who have had difficulties with foreign salons?

LETTERS TO THE EDITOR are welcomed from all readers on any subject. Please sign your name and address to all correspondence as anonymous letters are destroyed. If you prefer your name not

be used, mention the fact and your confidence will be held. Pictures sent for this column will not be returned unless a stamped, self-addressed envelope is enclosed. Ed.

SEND

AMERICAN PHOTOGRAPHY

421 Fifth Ave., So., Minneapolis 15, Minnesota

Gentlemen: Please enter my subscription to AMERICAN PHOTOGRAPHY for:

☐ one year \$2.50

☐ two years \$4.50

☐ three years \$6.25

Name _____

Address _____

City _____ State _____

☐ remittance enclosed

☐ please bill me

3

VOLUMES

A New Series: **MASTERWORKS OF PHOTOGRAPHY**

MASTERPIECES FROM THE AMERICAN ANNUAL

The selected works of 59 outstanding pictorial photographers, spanning the years 1940 to 1950 have been gathered together in a single volume, the first of the new **MASTERWORKS SERIES**. To aid your study, each print is accompanied by the cogent comments of Frank R. Frapic, Hon. F.R.P.S., Hon. F.P.S.A., former editor. A permanent record for the experienced . . . an excellent study for the beginner. Contains 82 pages, 7¼ by 9¾ inches. Plastic binding.

\$1.50

PICTORIAL FIGURE PHOTOGRAPHY

A worth-while volume for everyone interested in pictorial photography of the nude, volume two is a collection of the best works covering a period of more than fifty years. Text covers history of nude photography and a discussion of the psychology and esthetics of the human figure in all art forms. 48 illustrations are partly historical, but in the main are reproductions of the finest nudes appearing in **AMERICAN PHOTOGRAPHY** in recent years. Bound to match volume one, 80 pages, 7¼ by 9¾ inches.

\$2.00

MASTERPIECES FROM AMERICAN PHOTOGRAPHY

Volume three is a collection of photographs similar to the first volume in this series. However, the book is more strongly historical since photographs are included from a period of forty years. Again the comments provide a guide for both the novice and the master interested in tracing the trends in pictorialism as a guide to the future. 72 photographs are presented, carefully chosen for effect and balance. 80 pages, 7¼ by 9¾ inches.

\$1.50

AT YOUR FAVORITE CAMERA SHOP

or order direct from

BOOK DEPARTMENT

American
PHOTOGRAPHY

421 Fifth Avenue So., Minneapolis 15, Minn.



Notes

from the

Laboratory

by Herbert C. McKay, F.R.P.S., A.S.C.

Stereo is rapidly coming into its own. When first we began to devote a portion of this column to a discussion of stereo, there were but few readers interested and the total number of stereo cameras in use in the country was probably only a hundred or so. Today there are thousands of stereo cameras in use and more are being sold every day.

It is a good thing that more and more amateurs are coming to recognize the value of stereo but there is another side to the question. As is always the case, over-simplification tends to make the user think any process is too easy, and he becomes careless. Stereo happens to be one thing with which carelessness is wholly incompatible. Good stereo projection demands accuracy and care in preparing the slides. If such care is taken, stereo is beneficial to vision, but carelessly made slides can easily produce undesirable and, occasionally, painful eyestrain. The results of such carelessness are not so evident in the viewer as in the projector. Moreover, even if a slide is correctly prepared with regard to the bottom edge of the slide, if the top and bottom are not parallel, the image may be displaced when projecting, simply because the top of the slide is the significant guiding edge in projection.

Naturally projectors have adjustments which permit compensation for misplaced images, but if these adjustments are used constantly during the course of an evening's entertainment, the inevitable result will be eye fatigue and some members of the audience may suffer headaches or even a certain

nausea. Good stereo projection means that the adjustments of the projector shall not be touched during the projection.

We make constant use of the projector, showing stereo slides to various groups, many of whom have never seen stereo before in any form. We have had no complaints whatsoever and we make a point to ask various members of the audiences if any discomfort was experienced. The answer, to far at least, has invariably been, "No."

Let us consider what happens in projection.

You are familiar with the fact that

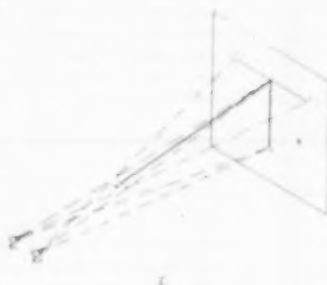


Figure 1.

when a photograph is made it is inverted. The image is upside down and turned right to left and vice-versa. The stereo camera is simply two cameras side by side and each lens performs this inversion independently. If you cut a stereogram apart and revolve both images through 180° , you will have a pair of images upside down. If

you now turn this pair right side up without disturbing their relative positions you will find that the right image is at the left and the left image at the right. This is the characteristic of a print made directly from a stereo negative and it is the characteristic of the individual frames in the processed color film.

Before the slide can be viewed, it is necessary to cut the images apart and place the left one at the right of the other. This is equivalent to cutting them and turning each through 180° . In black and white work it is common to cut the negative, transpose it and then print the complete stereogram at one time, but often the print is made

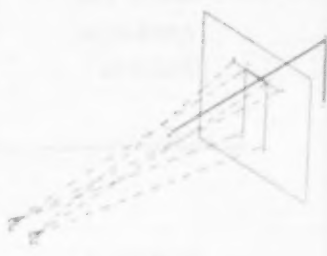


Figure 2.

from the uncut negative, the print then cut apart and the units mounted in correct relationship.

If you make a copy of a stereogram, using the ordinary camera and copying the slide as a whole, the negative will not require transposition, but if you make a copy with a stereo camera, then you will have to transpose again. Likewise, a "close coupled" stereogram projected by an ordinary projector is correctly oriented, but because the stereo projector has two lenses, the images are untransposed and the projected image is in the untransposed relationship. This would seem to be a grave difficulty but, in fact, such an orientation is better than if the images were transposed.

Imagine a stereogram of a vertical post, with an arm like an inverted L, pointing straight at you. The two stereo images would show the vertical post as vertical, but one would show the crossarm pointing left and the other to the right.

Figure One shows how this is projected. The vertical arms YZ are superimposed by projector adjustment. The two arms extend to the right and left

Herbert McKay, America's foremost authority on stereoscopic photography, will devote alternate "Notes from the Laboratory" to the problems of this field. Early next year, American Photography will publish a new book by Mr. McKay, the most complete review of stereo ever to be printed.

(YX-YX). In these images XX represents the near point. In the stereogram these are closer together than the distant point of the vertical YZ, but on the screen they are farther apart

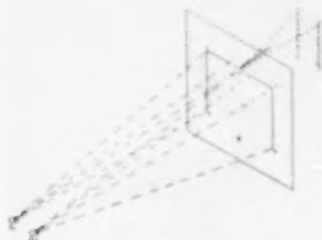


Figure 3.

than the distant images. The eyes converge so that their axes cross. The line YX is indicated by the dotted line at W, but instead of being seen as a short crossline, the point W is seen as the front end of the crossarm which extends backward as shown by the heavy line.

It should be noticed that the front end of the arm is not actually seen in space at W because apparent position of an object in space is not determined by the convergence of the eyes, but by parallax, which is fixed in the negative when the exposure is made. Even so, a considerable degree of convergence is required, and the one difficulty which confronts newcomers to stereo is the fact that any kind of stereo viewing necessitates the separate functioning of accommodation and convergence. It is difficult to converge at W and keep the accommodation (focus) set for the screen at S.

In Figure Two, the verticals have been moved apart so that upon the screen they are separated by about 65mm. Under this condition, the visual rays to YZ, YZ are substantially parallel, as is the case in direct vision of a distant object. X, X are closer together than in Figure One and the degree of convergence is less. That is, the position of W is much nearer the screen than in the first figure. If the YZ, YZ axes are truly parallel, convergence will take place at infinity, but UV will be a single line at infinity (but remember that visual position depends upon parallax, not upon convergence), and the crossarm will extend backward from W to meet the vertical arm.

Ordinarily, this is the preferred

projection adjustment. Set the lenses so that objects at infinity are separated by about two inches upon the screen. This is less than the normal pupillary distance but it provides a margin of safety for any member of the audience who happens to have a small pupillary separation.

In Figure Three, the images have their normal (transposed) relationship. X, X ends of the crossarm meet at a single point X. YZ and YZ are widely separated. This is the normal relationship of the stereogram with nearby images closer than those of more distant objects.

Convergence upon X takes place at the screen so that X is also W. However, to see YX, YZ as a single line, the eyes would have to diverge, and this is normally almost impossible. A certain portion of the horizontal lines toward Y, Y can be fused and show the crossarm extending back away from X, but as the two verticals cannot be fused, the rearwardly extending line from X splits in two. Two ghost verticals are seen, and the horizontal crossarm actually "dances;" fusing, then splitting and fusing again as vision is directed more nearly toward X.



Figure 4.

If YZ, YZ are separated only about three inches some eyes will diverge sufficiently to see them. Spreading the images will tend to pull the eyes with the images, but the result is painful eyestrain.

The right image, which means any part of the right image, should not be more than two inches to the right of the corresponding part of the left image. A greater separation in the opposite direction is permissible.

Often, one image will be higher than another (Figure Five). This is all right

THE smart Hollywood star knows that her greatest beauty asset lies in the glowing charm of her perfect complexion, the glorious tints and textures of her beautifully groomed hair and the flattering color themes of her smart wardrobe. That's why, every day, more stars agree with thousands of camera fans who say, "add color . . . for that wonderful difference."

Less than 1c per print . . . No artistic ability required . . . No colors to mix . . . No brushes necessary . . . You can't ruin a favorite print.

When the professional needs action-packed color prints, he uses the greater shutter speeds obtainable in black-and-white and adds Marshall's Photo-Oil Colors. Result—Sharp focus with exact colors where he wants them!

Send 15c for the 32-page illustrated book "How to Make Beautiful Color Prints . . ." Ask for the new Free Marshall Rainbow Color Chart at your dealer.

NEW Marshall Master Set \$11.60
Bigger and better than any photo-coloring set on the market!
Other Sets \$1.25-\$5.00.

MARSHALL'S PHOTO-OIL COLORS

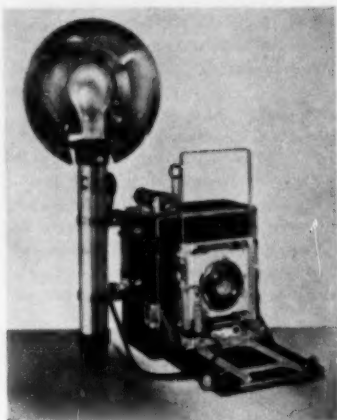
John G. Marshall Mfg. Co., Inc., Dept. A-11, 167 North 9th Street, Brooklyn, N. Y.

Canadian Dist.: Canada Photo Products, Ltd., 137 Wellington St. West, Toronto 1.

Setting the Pace for Press Cameras!



The versatile Pacemaker Crown and Speed Graphics



• These brilliant cameras are truly America's favorite press cameras, depended on by nearly 90% of all working press cameramen today. But the greatness of these cameras does not end with news photography. Such is their versatility that they are finding increasing use for industrial and commercial photography, for technical and scientific work, for schools, and by the amateur. What makes the Pacemaker Graphic so popular in so many fields? First, their dependability, which comes from enduring construction, uncompromising qual-

ity, and refinement of detail. Second, their many features: the choice of $2\frac{1}{4} \times 3\frac{1}{4}$, $3\frac{1}{4} \times 4\frac{1}{4}$, and 4×5 sizes; choice of sheet film, film pack, or roll film; the ground glass focusing; focal plane shutter with governed speeds to 1/1000th (Speed Graphics); built-in synchronization; selector switch for front or rear shutter; coupled range-finder; rising, shifting and tilting front; drop bed; and many, many more. See these cameras today—examine them—and compare them—at your dealer's!

A new favorite for flash GRAFLITE!



Finest, easiest-operating flash equipment you can own—that's what people everywhere are saying about Graflite. So many fine, well-thought-out points to help you get prize-winning pictures! Multi-purpose circuit-controller with choice of 3 circuits, 5 standard household plug outlets, interchangeable 3" and 7" reflectors, right, left, or dual mounting, push button bulb ejection, extension tubes for extra battery power. Here's the flash equipment that's best with your Graphic—best with any camera. And if you haven't yet used flash, you're missing half the fun of photography, for this is the way you'll get those indoor action shots, those candid portraits, those once-only chances where the natural light is poor. Fine outdoors in summer, too, when shadows are often hard, and dark.

GRAFATIC HOLDER for fast sequence shots



Designed to fit any $2\frac{1}{4} \times 3\frac{1}{4}$ Graphic, this new and exciting sheet film holder is designed for rapid sequence photography with sheet film. No thicker than a film pack adapter, yet it holds 6 sheets—cycles as quick as a flash! Compact, precise, ideal for rapid-fire series shots at weddings, sporting events, for news, and industrial studies. Only \$15.95.

120 ROLL HOLDER for film choice and economy



Adapts your Graphic or Graflex to economical 120 roll film, quickly and easily. With it you can take 8 full-sized

negatives or twelve $2\frac{1}{4}$ square. Increases your choice of films, cuts color costs too! Interchangeable, compact, only \$19.95 up.

Don't forget to have plenty of FILM HOLDERS



Don't miss that important picture because you don't have a spare holder with you. Play it safe—keep extras on hand, filled and ready. Your dealer has Graphic film holders of all sizes and types. There are no finer quality film holders on the market at any price. Rugged, tested light-tight.

GRAFLEX-GRAPHIC Photography

The complete handbook to help you get prize-winning pictures. Lavishly illustrated with pictures and diagrams. Published by Morgan & Lester, \$4.50.



GRAFLEX

Prize-Winning Cameras

Write for full details and literature on all items mentioned to Graflex, Inc., Dept. 346, Rochester 8, N.Y.

provided the displacement is not excessive. It is definitely better to have none at all, but ordinarily a displacement of $\frac{1}{2}$ inch for each 10 feet between spectator and screen is tolerable, representing something less than a half



Figure 5.

prism diopter deviation. ($\frac{1}{2}'' : 10' = 1:240 - \frac{1}{2}$ delta = 1:200.)

If the various axes of the two images are not parallel, the images will cross each other as in Figure Six. This is beyond compensation and the only thing to do is to dismount the films and remount them taking care to keep them parallel. Do not try to show such pictures even if the maximum



Figure 6.

difference amounts to only an inch on the full 50-inch screen.

Because twisters are painful it would seem that the remedy is obvious, but such is not true. Many amateurs persist in trying to compensate them by projector adjustment with the result that spectators' eyes are strained, and even correctly mounted and correctly projected slides which follow cannot be enjoyed when the eyes are still painful from strain.

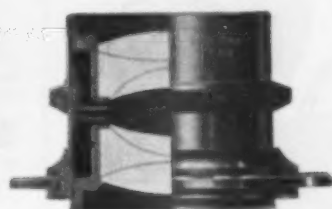
The projection problem is simple.

1. Use only slides whose separations lie between 62.5 and 64.5mm (63 to 64.5 is even better).

2. Be sure all slides are parallel and project without vertical or oblique displacement.

3. Project all slides privately before public exhibition to be sure they are all suitable and in good condition.

These simple precautions will enable



REMEMBER:

For making first-class pictures
"GOERZ AMERICAN" lenses have
given profitable satisfaction
for half a century

Goerz American PHOTO-LENSES

— An American Product Since 1899 —

GOERZ DAGOR DOUBLE ANASTIGMAT f:6.8

The standard by which a vast number of satisfied lens users prefer to judge lens performance, the DAGOR combines in one lens —

1. A perfectly corrected Rapid Anastigmat.
2. A wide-angle lens of smaller shape.
3. A long-focus lens when single element is used.

It truthfully records pictures with fascinating accuracy and brilliance, in clear and undistorted detail to the very corners of the film — for interiors, exteriors, commercial and amateur work, scenic views, groups, banquets, color film, copying, enlarging.

f:6.8 12 focal lengths $1\frac{1}{2}''$ to $12''$
f:7.7 3 focal lengths $14''$ to $19''$

GOERZ SUPER-DAGOR f:8

A Wide-Angle convertible Lens having a comparatively high f value for easy focusing and producing a crisp rectilinear image of 180 degrees maximum field of the smallest iris diaphragm aperture.

3 FOCAL LENGTHS: $38''$ — $48''$ — $61\frac{1}{2}''$

LIGHT FILTERS and SUNSHADES, imported — now available —

PANORPHO FILTERS

in clip-on mounts in a variety of sizes for miniature camera lenses. Yellow and green, each in 2 densities, also dark red, orange and light blue.

PANORPHO SUNSHADES

lens hoods and when taking pictures against the light — pushed onto your lens in a jiffy — the handiest thing ever — collapsible — sizes to fit standard lens diameters, with accurate adjustable push-on rings.

GOERZ ARTAR APOCHROMAT

f:9 to f:16

The ideal apochromatic process lens, for color separation with perfect register in the final process; also for black and white commercial work.

14 FOCAL LENGTHS: 4 to 70 INCHES

Sizes 4" and 6" for color separation blow-ups from 35mm and larger color films.

GOERZ PRISMS (for process lenses)

Of the Highest Accuracy — For reversed negatives to save stripping the film, and reduction work.

GOERZ APOGOR f:2.3

the movie lens with microstapit definition successful cameramen have been waiting for—

A new top element high quality lens for the 16 and 35mm film camera. Covered for all aberrations at full opening, giving highest definition in black & white and color. Made by skilled technicians with many years of optical training.

Fitted to precision focusing mount which moves the lens smoothly without rotating elements or shifting image.

This lens comes in C mount for 16mm camera. Fitting to other cameras upon special order.

Sizes available now: 35 and 50mm uncoated and 75mm coated.

To help you in the selection of the proper lens our long experience is at your service

Prompt shipments. Write for prices, giving your dealer's name.

The C. P. **GOERZ AMERICAN**
OPTICAL COMPANY

OFFICE AND FACTORY

317 EAST 34 ST., NEW YORK 16, N. Y.

**Want More Light, More Power?
JUST ADD IT ANYTIME.**

**AMGLO
BASIC FLASH UNIT
MODEL 2552-A**

Completely
Factory-wired
and Tested



The sharpest pictures possible with the greatest possible tonal variation are made with Anglo Speedlight Units. But more than that—an Anglo Unit can grow with your needs—have extra lights, extra power added beyond its original capacity, at anytime and at nominal cost.

This wonder electronic unit delivers "double or more light per flash." It produces a light of unequalled intensity with all the spectral quality of natural light. It eliminates blur in highest speed work. It avoids unnatural expressions due to heat and glare. It gives your camera greater flexibility by permitting a wider choice of shutter speeds and diaphragm settings. It protects against inadequate lighting and wasted film.

Anglo Units are easy to handle, economical to operate. Enjoy their exclusive advantages NOW for perfect photographic results—COLOR, SPORTS, PORTRAITURE, ULTRA-SPEED ACTION—indoors or out. There are 12 DC or AC Anglo Units to choose from. LEARN ABOUT THEM TODAY.

See **AMGLO SPEEDLIGHT UNITS** at your dealer—or write direct for new Anglo Speedlight Unit and Flash-tube catalogs.

AMGLO CORPORATION

4234 Lincoln Avenue

Chicago 18, Illinois

Remember!

AMGLO 1950 SPEEDLIGHT CONTEST

Closes Nov. 15—1000 prizes. Your dealer has details and entry blanks, or write direct.

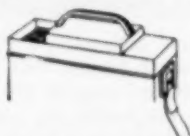
**to
AMGLO
Speedlight
Units**

Start with the AMGLO 55-watt Second Portable DC 2552-A that gives you up to 600 flashes per battery charge—and see how you have the answer to almost every possible lighting requirement.



You Can Double Its Original Power

Have an extra capacitor added. It fits right into the empty storage compartment and enables you to use small aperture settings for black and white or color work.



Add This Switch and Operate at Either 55- or 110-Watt Seconds

Have the end panel replaced by an Anglo Selector Switch Panel and you're ready to use the 55-ws to avoid over-exposure on closeups, and shoot fast "candid" . . . then switch anytime over to 100-ws for group shots or color work.



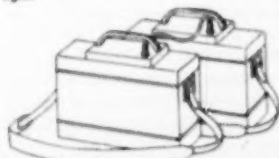
Operate 1, 2, 3 or 4 Lights at Once

A factory-added Switch and Socket Panel with Relay provides your Anglo Unit with almost limitless versatility. You can use 3 or 4 lights for superb home portraits—or operate 1 or 2 lights to augment dim outdoor light, or do candid work.



Combine the Power and Lights of Any Two Anglo Units

Two Anglo DC 2552-A's (or any two of the 11 other Anglo DC or AC Speedlight Units) can be easily inter-connected to operate in exact synchronization and satisfy special needs for more power and more light.



The Future of Salons



George B. Wright

Our correspondence lately has raised the question of the apparent difference of opinion between the standards for photography suggested in previous editorials and the actual contents of the magazine over the last issues. The pages of the last numbers have contained an unusually high proportion of "salon" material as against the type of material which these editorials seemed to foretell.

It is the opinion of *AMERICAN PHOTOGRAPHY* that the content of the salons at present is suffering from a large percentage of work that is imitative and uninspired; that it suffers from one or another of the fallacies defined in our August editorial: the presentation, for its own sake, of subject-matter, of design, of novelty or of technique without a larger integration of all of these.

From this premise there are several alternatives. Judging by what appears in print today, the most popular seems to be the attitude: "The salons are imperfect, therefore, we will have nothing to do with them beyond using them as bad examples in our critical writing." *AMERICAN PHOTOGRAPHY* prefers the attitude: "The salons are imperfect, but include many hundreds of active workers who are anxious to improve themselves and their work as rapidly as possible. Let us give what help we can."

Toward this end, we hope to keep our pages readable and of immediate benefit to this group as well as to that even larger group which does not participate in the "pictorialist" activities.

Raising Salon Standards

Two factors seem obvious in the effort to raise salon standards. The first is the recognition that the task of the artist is not to play to the most easily-aroused chords of public response, but slowly to raise the standards of the audience as time goes on. Elsewhere in this issue, Cecil B. Atwater comments on a New England show which hung both documentary and pictorialist prints. The public, apparently, overwhelmingly preferred the latter. Apart from the actual merits of the prints (which we did not see), this judgment is almost parallel to the radio practice of awarding prizes on the basis of audience applause. The decibel-readings in these cases measure the standards of taste of the audience rather than anything else. These standards of taste grow out of what is presented to the public over a period of years.

The second factor is the attraction of new groups to participate in salons and other public exhibitions of photography. The current Milwaukee show upon which we report in this issue is such an attempt. According to several reports reaching us, it suffers from many of the same shortcomings as do the current salons, but it is an attempt to broaden the base of work easily available to the public and is, if for no other reason, thereby a step forward. What public response will be is still too early to judge at this writing. The show, however, must increase by some small measure awareness and appreciation of current work.

The Opportunity in Salons

All of the arts lag because the amateur, who is very little differentiated from the audience and its tastes, tends to produce within that framework, and because the professional is in many cases also forced, for commercial reasons, to confine the bulk of his work to items which will appeal to the widest group. The amateur can escape from this more easily than can the professional. But he will never be able to, unless the opportunities for presenting more advanced work are offered him. It is the responsibility of salon committees and judges to see that he is given this opportunity.

The number of salon contributors is constantly increasing. More and more are being drawn in from the ranks of the beginners. This greater participation is one of the most encouraging signs in any of the arts today. Its only danger is that judging standards be lowered to hang a correspondingly greater number of prints. Along with these beginners, the salons must attract a greater number of mature producers from outside the "pictorialist" ranks who will contribute to raising the photographic standards of the shows.

AMERICAN PHOTOGRAPHY believes that it is necessary now, as always, to encourage both photographers and audience in the awareness that photography is an independent art, that its development is away from imitating the other arts whether they be academic or modern, and that, considering the situation as it actually exists today, one potent way lies through developing the full potentialities of the salons.



Like one of the Family...



AUTOMATIC Rolleiflex

Cock your ear, next time you're chatting with a Rolleiflex owner. Like a proud parent, he radiates affection for his camera. Keep your eye peeled, too, for the confident manner with which he handles every picture assignment. He knows he possesses the finest... because his picture results always prove it.

The unique Automatic Rolleiflex finds the first exposure... transports its film... cocks its shutter—all at the turn of a crank. Flash synchronized Compur Rapid shutter gives precise exposures from 1/500 to 1 second. Coated Schneider f:3.5, or Tessar f:3.5 or f:2.8 lenses. Companion Rolleicord models also available.

Burleigh Brooks Company

10 West 46th Street, New York 19, N. Y.

Western States: **PONDER & BEST, INC.**

1230 So. Grand Ave., Los Angeles 15, Cal.



SPEEDLIGHT



1. How to Choose It

by Andrew F. Henninger

IT IS A PROBLEM, isn't it? Choosing your first Speedlight, or for that matter your second, third or fourth. Seems simple at first glance but more and more uncertainties crop up when you try to pin things down to a definite choice. Let us assume you have definitely decided to obtain one and then attempt to correlate the type of work you do to the general type of Speedlight best suited for your needs. Viewed in its entirety, the problem is complex but when we break it down into steps, it becomes simple and, in most cases, the answer is instantly apparent.

As the first step, let us consider the types of power supplies and the advantages and disadvantages of each. You have your choice of three systems; a-c operation, battery portable and combined ac and battery. A brief discussion of these systems should help you to decide which will be most useful to you and best able to handle your most important work requirements.

A-c Speedlight units, of course, operate exclusively from the a-c line. If you are in a d-c area, forget power line operation; you must get a battery operated unit.

If you intend to take pictures *only* in studio, in home or locations having an a-c line readily available, your problem is simplified. A-c operation will be perfectly satisfactory and you can direct your thoughts exclusively to the problem of deciding *which* to obtain of the many excellent a-c units available.

These units consume surprisingly little current. An

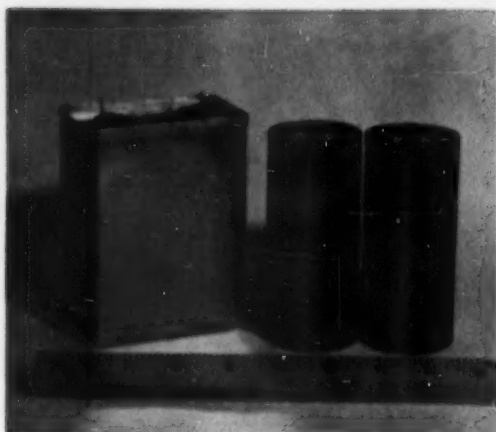
average sized a-c unit standing on your living room rug, glittering with chrome and enamel and with perhaps one or two jewelled indicating lights gleaming at you like eyes, looks like some marvel of the atomic age. You suspect an enormous appetite for electricity but in reality it is probably using less than a 60-watt incandescent lamp.

Battery operated Speedlight units possess the unique advantage of being usable in any location. An a-c line is required only to recharge the miniature storage batteries used as the power supply. The frequency with which recharging is required depends upon the ampere-hour capacity of the batteries, the efficiency of the capacitor charging circuit of the Speedlight unit and the power in watt-seconds of the unit.

The type of energy storage capacitors used is also to be taken into consideration as low-voltage electrolytic capacitors have considerably more "leakage" than the higher voltage oil-filled capacitors. Some electricity is wasted with the former so one would naturally expect fewer flashes from each battery charge.

With so many variables to influence results, you are quite right in expecting wide variations among portables in the number of flashes obtainable before battery recharging is necessary. In actual service, it will range from 50 to 600 flashes between different makes of units having, roughly, the same energy input to the flashtube.

Batteries can be recharged more than 200 times before reaching the end of their useful life if you give them



Typical examples of oil-filled and electrolytic capacitors. The oil (rectangular) capacitor is $2\frac{1}{2} \times 3\frac{1}{4} \times 4\frac{1}{4}$ and weighs $2\frac{1}{2}$ pounds. It provides an energy input to the lamp of 60 watt-seconds when it is charged to rated voltage. The electrolytic capacitors are $2\frac{1}{2} \times 1\frac{1}{8}$ inches in diameter and weigh $\frac{1}{2}$ pound. To obtain the same watt-second output as the other, $2\frac{1}{2}$ would be required in the circuit.

the little attention they require. Keep the liquid level above the indicating line by adding water when necessary and recharge them about every three weeks when not in use. Even when completely discharged, an over-night charging will usually bring them up to full power.

By all means, get a portable Speedlight that you can carry with a shoulder strap if your range of prospective uses include wedding shots, banquet and convention work, informal portraiture, press work or flash fill-in of outdoor pictures. If your prospective unit is equipped for two light operation—some of them will handle up to four—you can use a more elaborate set-up for portrait lighting.

Miniature camera users, wedding photographers and those on press and magazine assignments take many pictures in one day and they, in particular, should make sure that the flash unit they expect to purchase will provide an adequate number of flashes from one battery charge. Another desirable feature for this type of work is to have quick interchangeability of batteries, so that a freshly charged set can be installed when needed.

Portable units range in weight from 6 to 12 pounds. The light output is roughly proportional to the weight and usually better performance and increased versatility can be expected from the heavier units.

Units that operate from either ac or batteries are obtainable. Circuits and building instructions are also available for the home builder. At first thought, a unit of this type would seem to combine the advantages of both ac and battery operation. In actual practice, this is only partly true. We have added appreciably to the weight, size and cost, and a higher powered unit may be slightly awkward to handle when considered strictly from the viewpoint of portability. A unit of this type would seem to be intended principally for ac operation with only occasional usage as a portable. Both from operational and engineering viewpoints, perhaps the best bet is a high-efficiency, strictly portable unit capable of providing sev-

eral hundred flashes from one battery charge. This should adequately handle most picture taking requirements for one day and the batteries can be recharged overnight for the next day's work.

Some of the smaller, low powered ac units can also be operated from batteries. The usual attachment, which is sold as an accessory, comprises batteries, vibrator and transformer. This equipment converts the dc voltage from the batteries and steps it up so that the output can be connected to the ac input of the original ac unit. While this system provides the user with portable operation, he obviously cannot expect the same efficiency obtainable from a straight portable because of additional circuit losses.

The above information should be helpful, in at least some degree, in enabling you to make a decision on the type power supply you require. We can now look at flashing systems, of which there are two types, those used with self-ionizing flash tubes and those with grid control.

Flashing Systems

These two methods of discharging the energy of the storage capacitors through the flashtube are in general use in both ac and portable models.

One method requires the use of a self-ionizing flashtube and a specially designed relay to connect the capacitor to the lamp circuit during the brief instant of discharge. There is no high voltage on the lamp cable between flashes and this permits the use of lighter weight fittings and smaller, more flexible cables. The relay coil is completely isolated from the high-voltage portion of the circuit and is actuated either by the batteries in a standard flashgun, when solenoid shutter trippers are used, or from the storage batteries of a portable unit when using built-in shutter contacts. Best synchronization is obtained with shutter contacts having the 5- or 20-millisecond delay suitable for flashbulbs.

The current consumed by the relay is usually about half that required for flashbulbs. Consequently, long life is obtained from both batteries and shutter contacts.

Adapters are available so that either Speedlight or flashbulbs may be used in standard flashguns with instant interchangeability. If Speedlight is used exclusively, special, high-efficiency flashtube reflectors are a part of the installation.

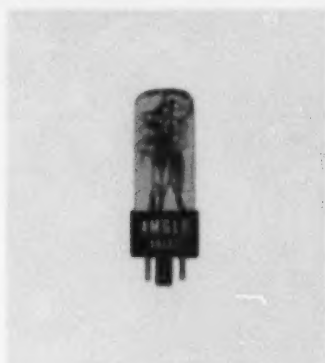
The relay used with this system should have adequate insulation for the voltage involved and the contacts should be made of silver-cadmium alloy to prevent sticking. A rheostat is usually connected in series with the relay coil to provide an adjustable closure time so that the flash occurs when the camera shutter is open. If the same voltage is applied to the relay coil for each closure, the accuracy would be measured in millionths of a second. This is, of course, far greater in accuracy than the best camera shutters.

The operation of telephone exchanges is based upon the use of thousands of relays. This is the simple, direct and

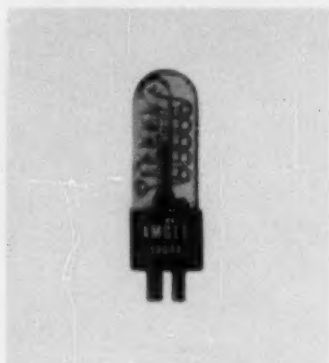
An exposure with open flash at $f/32$ captured this intriguing expression for Lloyd G. Sandgren on 8x10 Triple-S Pan. Instantaneous moods are recorded by Speedlight—if the operator is on his toes.



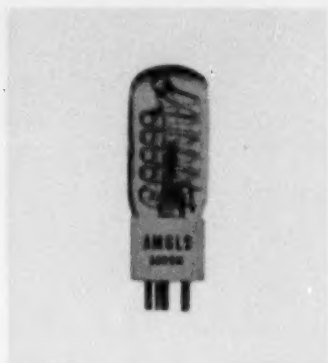
One of the new low-voltage flashtubes. This operates at either 450 or 900 volts with electric capacitors with a symmetrical area of light emission and high-intensity discharge.



Self-ionizing flashtube using the simple and reliable relay control. This has adjustable time delay and may be used with shutters employing internal contacts or with solenoids.



Trigger-type tube requires ignition coil for flashing. This tube operates in the 2,000 to 2,300 volt range and furnishes a flash of extremely brief duration when properly used.



reliable method of connecting two circuits and provides the exceptional dependability that one would expect.

Considerable space has been taken to describe this flashing system because of some highly incorrect published information on self-ionizing flashtubes and relay control.

The other (trigger type) flashing system usually requires that the voltage from the storage capacitors be permanently connected to the flashtube.

An ignition coil capable of providing a several thousand volt pulse to the control electrode is used to initiate ionization. There is no appreciable delay between closure of the firing contacts and the flash, so that special shutter contacts, having "zero" delay are required for flashing. Shutters with contacts having a time delay suitable for flashbulbs will not "sync" to this system unless auxiliary equipment, such as a relay, is employed to introduce the required adjustable time delay.

At least one type of low voltage, portable flash unit, while having a grid controlled flashtube, employs a relay for the triple purpose of introducing an adjustable time delay, keeping high voltage off the lamp cable between flashes and automatically delivering the triggering pulse to flash the lamp.

Both a-c and portable flash units are available in the so-called high-voltage and low-voltage types.

The high-voltage type uses oil-filled capacitors and usually operates at 2000 to 2300 volts. This system is characterized by a high intensity, short duration discharge and somewhat higher operating efficiency since there is practically no internal electrical leakage of the capacitors.

WATCH FOR

Future articles in this series by Andrew F. Henninger on Speedlights in coming issues of *American Photography*. Full explanations of "How to Use It" and "How to Build It" are now in preparation for our pages. Questions on Speedlights may be addressed to the author in care of this magazine.

Designed exclusively for flashtube use, this reflector concentrates most of the light in the actual picture area and uses material of high reflectivity to avoid wastage of light within the gadget.



The weight and size are slightly greater for a similar energy input to the flashtube.

The low-voltage type employs electrolytic capacitors and the majority of units operate at either 450 or 900 volts. Since approximately 550 mfd. of capacitance must be used at 450 volts to provide the same energy input to the flashtube that a 20 mfd. oil-filled capacitor will provide at the higher voltage, the time duration of the flash is appreciably longer. With flashtubes of average resistance, the duration would be about 1/600 second for electrolytic capacitors and 1/10,000 second for the oil-filled. If the electrolytic capacitors are connected in series parallel for 900-volt operation, the capacity would be reduced to $\frac{1}{4}$ of 550 mfd. and the time duration of the discharge would then be shortened to 1/2400 second.

With otherwise similar operating conditions there is a

noticeable increase in emulsion response to flashes of longer duration, especially those of 1/1000 second and longer, because of the reduced effect of reciprocity law failure. However, much of the "increased light output" of units using electrolytic capacitors is due to manufacturing variations in the capacitors. Many of them vary from -10 percent to +40 percent of their rated capacity. A capacitor ranging toward the +40 percent side would actually deliver more energy in watt-seconds to the lamp with a corresponding increase in light output.

Capacitors and Reflectors

Electrolytic capacitors have the advantage of lighter weight and longer flash duration. This last feature might, of course, be considered a disadvantage where extremely high speed action must be photographed. Their disadvantage is internal electrical leakage, which becomes excessively high when the capacitors "deform" when the unit has not been used for a few days. When this occurs they can be brought back to their original condition by a few minutes of charging. When using these capacitors in cold weather a reduction in capacity and light output too, of course must be expected and allowed for.

Among presently available flash units, numerous variations exist in the amount of light directed upon the subject. One of these variables is the actual power rating in watt-seconds of the unit. You have control over this as you can select one having suitable power requirements.

Another variable is the type flashtube used and its efficiency in converting watt-seconds into light. The difference between "best" and "poorest" would be about 100 percent.

A third variable, and it may be considered the most important, is the type and efficiency of the reflector used. Actual differences ranging up to 600 percent have been measured between the very best and the very poorest. The best reflectors are those specifically designed for use with flashtubes. They should have such general shape and curvature that most of the light is reflected into the actual area covered by the camera lens. One of the most efficient reflective materials is Alzak aluminum. It also has the additional advantages of a hard surface and of being permanently non-tarnishing. While a specially designed reflector of this type is more expensive, as it must be spun, not stamped, of special materials, the extra cost is well justified in that the considerable increase in light provided would be far more expensive to duplicate by increasing the power of the flash unit.

One of the most frequently asked questions and one of the most difficult to answer, is what specific guide number to use with a given type of flash unit. Even though the exact light output is known, information concerning the type film and developer to be used and development time must also be provided before reasonably accurate guide numbers can be given.

Different film emulsions vary in their response to speedlight, seemingly, with a bland indifference to their assigned ASA ratings. Among the sheet films, Isopan is a favorite as it has a response all out of proportion to its comparatively low ASA rating of 50. It also reacts quite well to extended development and has excellent fine grain characteristics. Of the roll films, medium speed is usually preferred, Superpan Supreme being a widely used favorite.

The majority of speedlight users extend time of devel-

opment from 25 percent to 100 percent with perhaps 50 percent being the most common usage. Speedlighting is quite soft and negatives can be given considerable extended development without blocking up highlights and producing the excessive contrast that might result from usual lighting if accorded similar treatment.

Keep all solutions as close to the same temperature as possible and watch out for the other factors affecting grain size. You will be agreeably surprised at how far you can extend development of speedlight negatives without producing objectionable grain.

Speedlight units having an energy input to the flashtubes of from 50 to 150 watt-seconds will enable you to work with diaphragm aperture settings of from $f/11$ to $f/32$ for portraiture. With high efficiency specular, or bright, reflectors settings of $f/8$ to $f/16$ can be used for indoor sports, such as basketball at distances of from 20 to 40 feet.

It is surprising what top-quality work can be produced with low powered, comparatively inexpensive Speedlight units. It is possible, of course, to spend thousands of dollars for elaborate equipment if you want to impress and awe your subjects. Most subjects, however, would prefer to be impressed later by the outstanding quality of the speedlight photograph, showing them natural, animated and unimpressed.

A Speedlight portrait by Charles Burd made with three lamps at $f/18$ on 5x7 Superpan Press. Double backlighting and soft front fill give a sparkling child portrait. Speed catches peak expression.



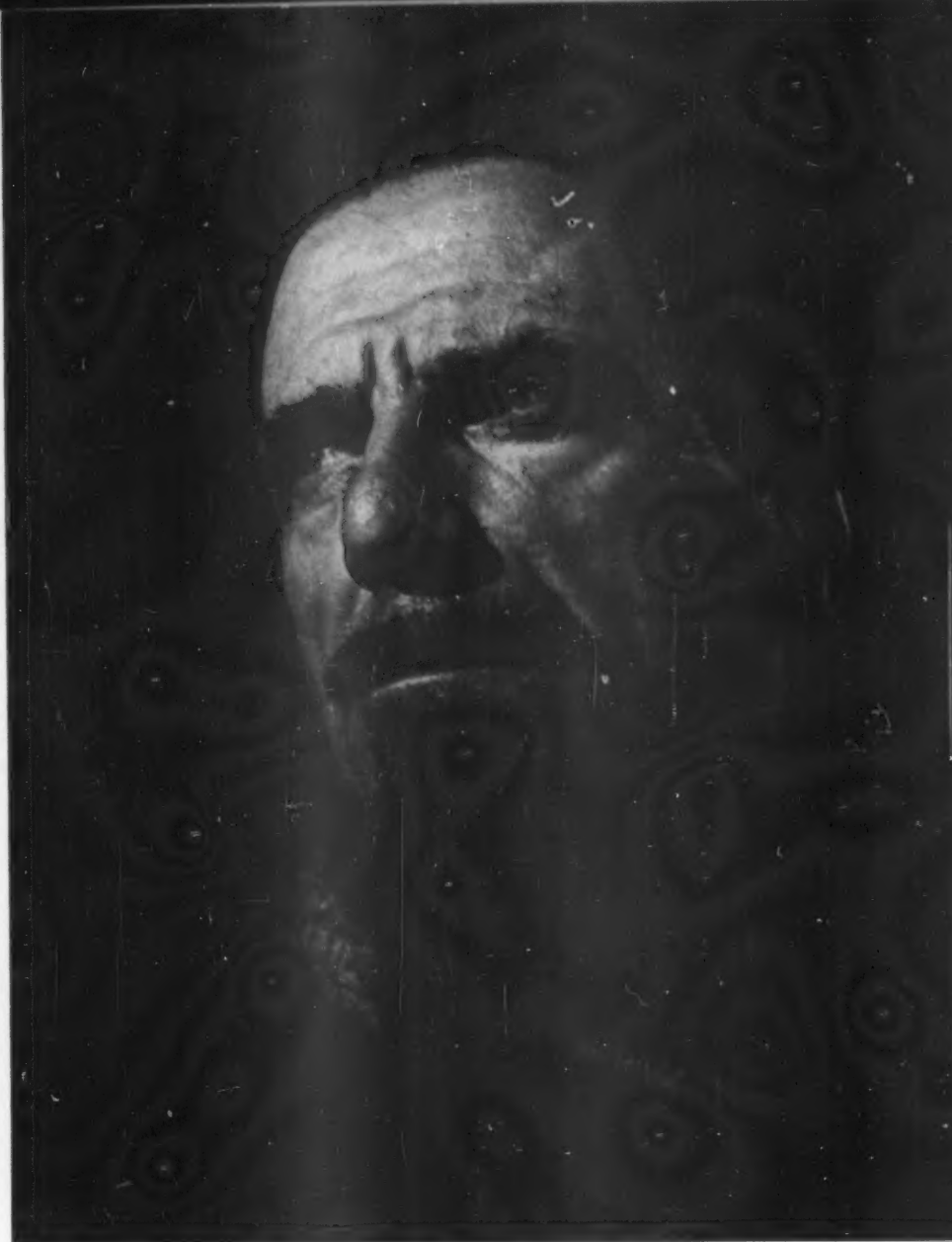
SALON SECTION

This month our salon is a portfolio of prints by a comparative newcomer to photography, K. Pazowski. The work of this brilliant young Londoner is beginning to appear with increasing frequency in photographic magazines throughout the world. A glance at this selection will reveal the reason—a simplicity of presentation that does not mask an almost force sincerity. His pictures gain impact with each viewing, reveal more meaning and greater subtlety.

Pazowski, born in Vilno, Poland, planned early in life on a writing career but the war in Europe caught him at 18 with the plan still unrealized. Interned during the first two years of the war, he later became an officer in the Polish navy and served until the end of hostilities.

Uprooted, he emigrated to England and there found his creative outlet in photography. At present a free-lancer, he specializes in theatre and creative photography.

All of the following pictures were made with a Rolleicord with f/3.5 Triotar on Ilford H. P. 3 film.



OTHELLO

K. Pazovski



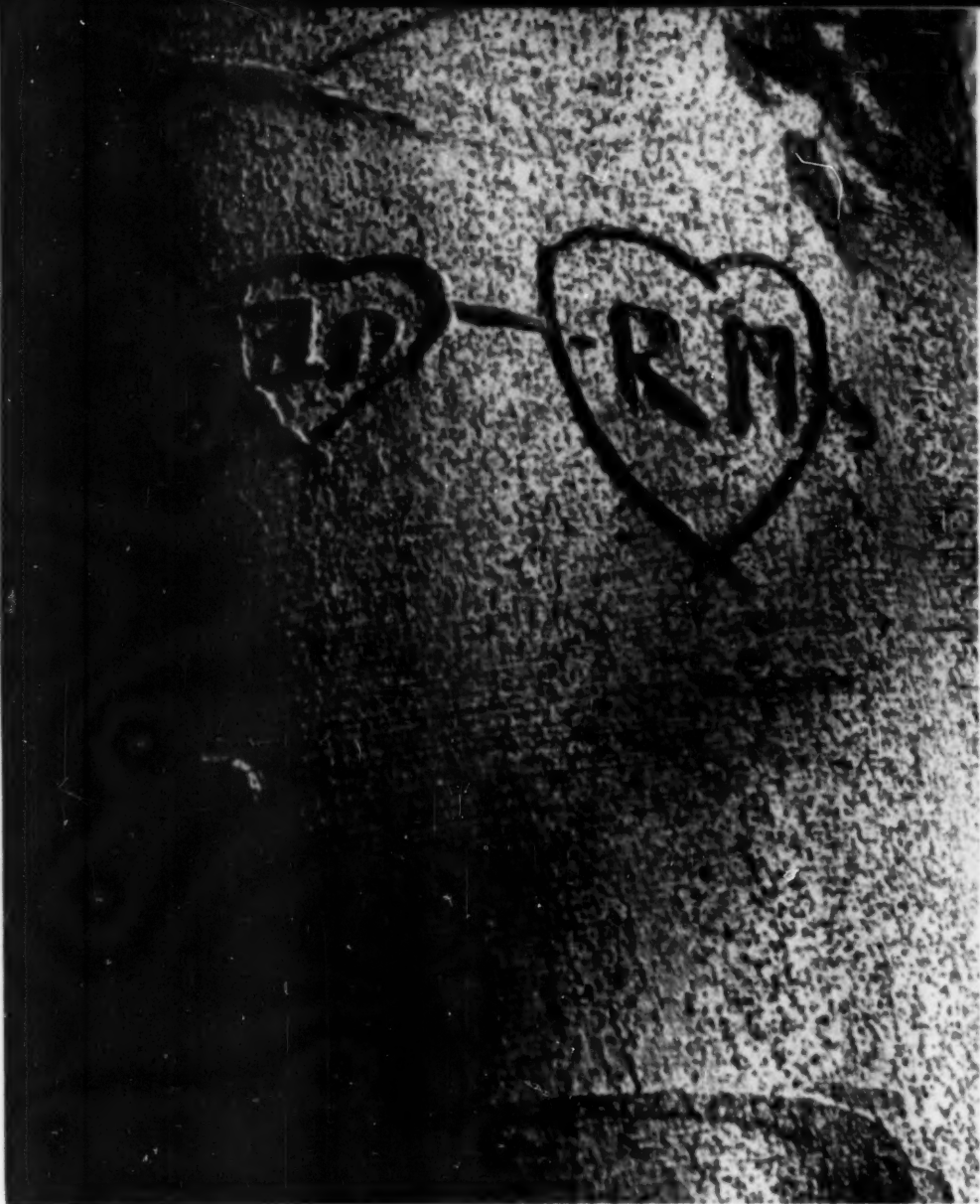
K. Pazovskij

ALLAH

K. Pazovska

SWAN SONG





ROMANCE

K. Pazovski



PAULETTE

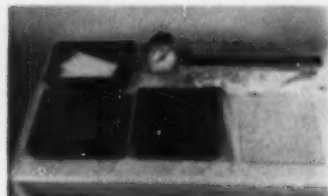
K. Pazouski

save money with

MINIATURE CARBROS

by Edward G. Lewis

Set-up for making carbros prints: three bromides in water, pigment paper, sensitizer.



YOU DON'T HAVE TO DISCOVER a gold mine before you try out three-color carbros printing. It costs more than black and white, but not much more when you think of the extra fun that you get out of making a really good three-color print.

There are two important ways of keeping color prints inexpensive. One is to keep the print size small and the other is to avoid mistakes.

Take first the print size. Certainly for the first attempts the size ought not to be larger than $2\frac{1}{4} \times 3\frac{1}{4}$. The necessary pigment papers, four of each color, can be bought in convenient 8x10 packages. At a little over \$3 a package, by cutting, you can get 32 small prints out of one package. That makes pigment paper for each print cost about 10 cents.

You will need, in addition, a piece of soft gelatin support paper for combining the three pigment images and a piece of hard gelatin support paper for the final print. For these add a little over three cents per $2\frac{1}{2} \times 4$ print.

Then you need three bromide prints, one from each separation negative, on special bromide paper. Three pieces, cut to $2\frac{1}{2} \times 4$, cost about five cents.

Taken altogether, the cost of a $2\frac{1}{4} \times 3\frac{1}{4}$ print will be about 18 cents, not counting chemicals. The chemicals won't add much to the cost—let's say two cents a print.

It isn't fair, though, to say that a color print costs only 20 cents, not counting your time. After all, you do need three-color separation negatives before you can make your print.

Here again, though, there is a saving to be made from using small sizes. By contact printing, you can get six 35mm transparencies plus a grey scale on one 9x12cm cut film.

Incidentally, contact printing of separation negatives has the added advantage of cutting out the problem of color correction of the enlarging lens. There is still the old bugbear of grain. But as long as your bromide enlargements are not much larger than 4x5, ordinary processing will not make the negative objectionably grainy. Certainly the grain is not noticeable in a $2\frac{1}{4} \times 3\frac{1}{4}$ enlargement.

The other major saving comes from eliminating mistakes. Mistakes in color printing really run into money because a slip along the line usually upsets the entire picture and the loss is three times as great as with black and white because of the three colors. If you will buy a standard guide on color printing, such as Carlton Dunn's *Natural Color Photography*, read and reread it, you will save the book's cost several times over by avoiding errors.

You can profit from inevitable beginner's errors if you keep a color notebook. You should record every major factor for each negative and print, so that you can track down your errors, eliminate them and work out a standardized procedure.

There are some errors that beginners nearly always make. For example, some think that any bromide paper will work. It won't. Almost all super-

coated bromide papers will make pale color prints or will have mottled or washed-out highlights. Another common mistake is to use a hardening hypo.

Once you do get a good carbros print, you can make other good carbros prints much more easily if you keep your used, redeveloped bromide prints as guides to printing depth.

Some errors are made in the pigment part of the process. Letting the solutions get above 65F is one. The results are not always fatal, but it is more difficult to make a good print at high temperatures than at low ones. My own temperature control system is cheap enough—I use the family refrigerator for the pigment-bromide combination and the pigment-plastic combination between steps.

Another error is being careless with the timing of the pigment paper in the bleach-sensitizer. Two or three seconds either way will upset the final print. Another cause of trouble is dirty trays and graduates. I wash them in hot water that has some detergent in it, then rinse thoroughly. I use the same treatment on my plastic supports—and work them over as well with a scrub brush.

This catalog of possible mistakes—and these are only some of them—should not frighten you away from the process. It is not nearly so complicated as it sounds, although certainly it is more difficult than simple black and white.



Lowering sensitized pigment paper on to print and squeegeeing for perfect contact.



WHAT'S THE USE
OF PICTURE-DATA?

Pop sez . . .



Franklin I. Jordan, F.P.S.A., F.R.P.S.

WE HAVE JUST BEEN compiling the data for the pictorial illustrations of the forthcoming issue of AMERICAN ANNUAL OF PHOTOGRAPHY. As they come literally from the ends of the earth, it is always quite a job to send out data blanks to the makers of all these prints requesting information about how they were made and to get the returns back in time for publication. But after three months they are practically all in. Distance was not the only factor that slowed them down, because some from America came back later than others from Australia and China.

While few of the contestants furnished all the information requested, practically every one of them identified his camera and lens. Most of them also specifically stated what kind of film was used, although a few were so delightfully indefinite as to say Ilford, Agfa or pan. The great majority were careful to tell what developer they used for the film. But when it came to the subject of paper, the returns began to get very sketchy, many contenting themselves with saying, "bromide," "chlorobromide" or even "straight enlargement."

Added to the difficulties of distance and of many different languages, there was another factor in getting this information that few people would anticipate. We cannot help feeling that there must be some significance in the fact that it was a rare return indeed that spelled correctly the names of all

"Pop" is the affectionate nickname that follows Franklin I. Jordan, F.R.P.S., F.P.S.A., around. There is no writer on photography who can get across so much information while you are chuckling with him. This month he discusses the equipment with which our recent competition prints were made.

the materials used, although we are at a loss to know what conclusion to draw from that. You might expect a man to at least know how to spell the name of the camera that is his chief pride and joy, but he often did not. Only one out of three users of one particular camera spelled it correctly. As it was of European make and not listed in current American literature, it took us a couple of hours to establish the correct spelling of this one word. No wonder editors tend to become gray where they are not bald. Whenever time permitted, this entailed further correspondence with the maker of the print.

We can't help wondering by what quirk of mentality a bunch of people who are obviously far more observant than the average of most things around them, could be so unobservant of pointed words that greet their eyes daily.

However, in spite of many difficulties that consumed a lot of time, we finally got together much information that we think valuable enough to justify all the effort. The facts presented by any single one of these data sheets

is seldom of much particular interest. Some people scorn the exact data about how any picture was made and claim that it can be of no value to anyone else because exact conditions can never be duplicated. But we have found through the years that most of our readers have a lively enough interest in this information to warrant the trouble of collecting it.

Its value is not so much in learning how any one particular picture was made, as it is in showing by the collective data what type of material and apparatus the majority of pictorial workers have found best adapted to their needs. It reassures them, or otherwise, on such recurrent questions as: Is it really necessary for me to tote around this big heavy box? Is some other developer better than the one I am using? Shouldn't I use a faster film? Or one with finer grain? What paper are most of those wonderful salon prints made on?

In spite of all our care in compiling these data, the question often arises as to how accurate they really are. Do the people who furnish the information actually have records from which they can supply the facts requested? We confess that within our own observation very few workers keep complete records of every shot made after the first few enthusiastic years, but we feel that this need cause no concern about the substantial accuracy of the returns.

When asked for the data about any

print, lacking any record of how it was made, the worker looks the print over and tries to reconstruct the conditions. He will undoubtedly know what camera he used and what lens was on it. A glance at the picture will usually recall the circumstances well enough to make him remember the time of day and month of the year accurately enough. The light conditions are self-evident. He customarily uses a certain kind of film, and if he happened to use a different one for this particular picture, that circumstance would be unusual enough to make him remember what other film he used, and why. Otherwise he can safely assert that it was made upon his standard film. He has most likely settled upon the use of one developer and never uses anything else. The print was made so recently that he will well remember all the details of that. There remains only the shutter speed, the diaphragm opening and the filter, if any. If he does not remember these details, he fills in those spaces by looking at the picture and putting down what would be his normal practice under similar circumstances.

As all this amounts to a summing up of his whole photographic experience; it is perhaps even more valuable than the exact details on any particular print might have been. All that we hope to find out from our efforts is the customary procedure of pictorial workers and we are convinced that the information presented gives, as a whole, a pretty accurate picture of what they are using and how they are operating.

How Big?

Beginners frequently ask us what size of camera they should buy. This is so much a matter of personal preference that helpful advice can seldom be given. With a lot of people the cost of film is the determining factor in this respect. For others, weight and bulk of apparatus are more important considerations. Small cameras are ruled out by many workers because they do not operate carefully enough to get good results. But our figures show unmistakably what size most pictorialists prefer. Out of 66 returns available at the time of writing, 39 workers used cameras taking the 2½-inch film. Most of these cameras gave the 2½-inch square negative, without doubt the most popular size in use today.

The miniature sizes, by which we mean Bantam or smaller, were used by eight workers. Their results were enlarged all the way up to 20 diameters, but we have to admit that we could never pick these pictures out by their looks. Not one of them showed the least sign of overenlargement—which proves that they were not overenlarged, no matter what the magnification. Those people who claim that you can enlarge no negative more than 10 diameters without loss of quality, only mean that they can not do it. This just proves that they do not live right.

There were 19 pictures out of the 66 made by cameras larger than 2½ inches. These ran from 3¼x4¼ to 5x7 inches. The 8x10 size once most generally used for studio portraits, seems to have given place among pictorial workers to smaller sizes. Quite a number of them still use the larger camera, but with a reducing back.

Roll Film Popular

The great majority of these workers, 50 out of 66, used rollfilm. Only one of them used plates. The other 15 were about equally divided between sheet film and film-pack.

It is interesting to note that 33 of these workers used visual-focus reflecting cameras, most of them of the twin-lens variety. Just half of them prefer a reflecting camera for their work. This type of camera is undoubtedly a great aid in arranging subject matter and selecting the best viewpoint, and it also permits selective focusing. It is the modern way of preserving the advantages of the old groundglass camera which serious workers were loath for many years to give up on account of its many manifest advantages.

Panchromatic film is the overwhelming choice of these workers. Out of 63 reporting in this respect, only 6 used ortho. To further correct panchromatic film, 21 operators used a light yellow filter. Only two used stronger filters. The day of violent tonal contrasts seems happily to have passed. Practically all workers used a fine-grain developer, although one in four considered D-76 fine enough for his needs. One each used pyro-catechin, pyro, paraphenylenediamine or metol-sulfite. All the others used some compound of good old MQ, usually the formula of the manufacturer of the film. Trick developers, once so

prevalent, are no longer a popular form of amusement.

Most of the workers were content with slow or medium speed films of fine grain. Only nine workers reported the use of high speed film. Super-XX had the distinction of being the one film most frequently used, 16 out of 63. The great majority of prints were upon chlorobromide paper, Opal leading that list.

To keep informed about current practice and trends, we have been compiling this information for the past 16 years, although we believe this is the first time we have given it any publicity. In that time the most noticeable change has been in films and papers, which have been improved to such a remarkable degree that most of those in common use today were not then even on the market.

But a very significant change has been going on in the size of cameras. In 1936, out of 80 workers reporting, there were 5 using miniature cameras and 19 that used the 2½ size; but 56, by far the greater majority, made their negatives larger than that, running up to 8x10 inches. The prediction at that time was that everything would eventually go miniature. But as usual in the long run, moderation has prevailed, and while more and more workers have abandoned the larger sizes, the movement for the present seems to have become stabilized in the 2½ sizes.

Current Contest

Graflex \$5,000 Photo Contest opens October 1. All pictures made since Dec. 1, 1949, with a Graphic, Graflex, Crown or Century camera by photographers anywhere in the world will be eligible to compete for 62 cash prizes. Subject matter is unlimited, and teenagers, non-professionals and professionals, make up the three classes. The color division is also open to all three classes.

In addition to the cash prizes, one lucky contestant will win the chance to spend a full week in New York working with leading press photographers, as the guest of Graflex. Judges will be announced at a later date.

Official contest rules folders, containing five entry forms, will be available at all Graflex dealers or by mail from Graflex, Inc., Rochester 8, N. Y.

Busy ~~Bleak~~ November

The
Kodak
BULLETIN

"Dead month, November. Nothing worth doing."

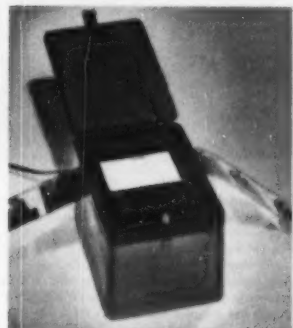
"On the contrary. There are no dead months in amateur photography. It's the inexhaustible hobby, with rewards at every turn, any hour, any day, any time of the year . . . and twenty-four hours a day are never enough to reap all the potential harvest. Here are more than a score of projects that could busy you gainfully right now . . ."

Sort out and contact-print *all* your negatives, everything you've taken from the beginning, so you have a complete file record. In the process, you'll find many a forgotten treasure—maybe a gold mine of salon and gift material. File and index the

(Continued on next page)



A good contact printer is mighty helpful in bringing the album up to date. Best bet is an efficient, all-metal Kodak Home Printer (below); only \$12.50.



After the printing, the mounting. Kodak Rapid Mounting Cement (below) is quick, reliable, non-staining. Half-ounce tube, 30 cents; 1½-ounce tube, 35 cents.



Prices are list and include Federal Tax where applicable

Once you've brought your collection up to date, tidy filing of each new group of negatives takes but a few moments—with the right file. A Kodak Negative File is your best choice—it offers a chemically safe envelope for each negative (or short strips of miniature negatives) and a handy index. Nine sizes, up to 5x7; \$2.35 to \$3.25.

As you sort out your negatives, select the pictures you'd like to put into a Christmas gift book for your wife—or a volume of family pictorial history. No gift will be more deeply treasured than a personalized book of big dramatic enlargements—8x10, 10x12, or 11x14. Kodak Platino Paper is especially recommended for such books, because of its high printing speed and its rich warm-black tones. Kodak Resisto Rapid N Paper is another good choice—it's fast to print; its water-resistant base speeds up washing; and the base is extra-tough, able to stand a lot of handling. Bind the book (see right) with plastic or wire spiral; many printers and binders now offer this service at low cost.



Make a special pictorial project of Thanksgiving this year—plan a complete pictorial coverage of the holiday. Such a project will give you wonderful training in photo-reporting; knowledge that's sure to be useful sometime later. This will be chiefly an indoor operation, so make sure you're adequately supplied with the proper films—Kodak Super-XX or Super Panchroma Film, Type B, for the flood shots, Kodak Verichrome or Super Ortho-Press Film for flash. Make a special Thanksgiving album from the pictures; at right is one of many possible cover ideas.



Continued on next page

For print mounting, many prefer Kodak ThermoMount Tissue and the Kodak ThermoMount Iron (at left). The iron, \$9.75. Tissue, 144 sheets 2½x3½, 50 cents; 144 sheets 5x7, \$1.55; other sizes available.



Kodak

The Kodak BULLETIN

negatives in Kodak Negative Files; put the contact prints on file cards, leaving space for enlarging exposure data, dodging notes, correct paper contrast, salon acceptances, and so on.

Go through your negative and print files, pick out the pictures that show the highlights of your family history, and print a big gift enlargement book for your wife, your parents—or books for both. There's no

grander gift in the world—but you'll need to start now and work fast, if the project is to be completed safely before Christmas.

Outline a shooting script for Thanksgiving this year—as if you were assigned to report the event for a national picture magazine. Start with the selection of the turkey... kitchen activities... arrival of guests... the carving... each step right through to the end. Then do a complete job of reporting with your camera. This can be a most valuable bit of training in photo-reportage—and the pictures furnish you material for another family album.

Finish up your Christmas cards, and get them into the mail. If you haven't started, get started now—not another day's delay! Your Kodak dealer has every technical aid

you could possibly need (some of the details are in this Kodak Bulletin). Don't let the calendar sneak up on you!

Start your Christmas picture story as soon as gift purchases start—and carry it right through to the end. In November, there will be shopping tours and gift wrapping to picture... and November is the month to plan the later pictures, and stock up with adequate supplies of film and flash lamps. If your earlier Christmas stories have all been in black-and-white, let full-color share the story this year.

Gear up your darkroom for better work in the months ahead. Dispose of chipped or cracked trays, and replace them with tough, durable Kodak Enamelled Trays or Kodak Hard Rubber Trays. Discard stale or

Start early on your Christmas picture story—with the first shopping trips and the wrapping of gifts. Shoot a goodly part of it in color (you can also make black-and-white prints from your Kodachrome negatives, and black-and-white negatives from your Kodachrome and Kodak Ektachrome film transparencies).

Finish up your Christmas greeting cards—print them yourself, or pick your negative and trust the job to your photofinisher. Christmas is closer than you think—and the mails will soon be crowded.

Christmas card designs such as those at left are available from most photofinishers—and if you print your own cards, your Kodak dealer can supply you masks of these or similar designs, ready for use as soon as you insert a negative. Masks for 2½x3½, 1½x2½, 2¼-square, and 2½x4¼ negatives, \$1.10 each. Special masks for miniature negatives (the whole mask fits in a 2½x3½ enlarger), 60 cents each.

Other aids: Kodak Azo or Kodabromide Paper, 4¼x5½; standard white envelopes to fit 4¼x5½ cards; lightweight Kodak Ad-Type A Paper, 8½x11½, for French-fold cards. Kodak Christmas Folders, too (you simply slip a contact print behind the mask opening, and you have a handsome, colorful French-fold greeting). Ask your Kodak dealer for details.



Speaking of greeting masks... Pictured below is a year-around mask, basic material for a whole series of individualized greetings. It provides Christmas material, Easter material, and material for a Valentine... also a design gaffer can use... and one for Father's Day... and two for birth announcements... and salutations in six different type-styles. It's 8x10; you cut it apart for use. \$1.75 from your Kodak dealer.



Prices are list and include Federal Tax where applicable

doubtful chemicals, and re-stock with fresh, reliable Kodak chemical preparations. Examine your stock of printing paper for expiration dates, and plan to use up any that's approaching a decrepit old age. Take care of your comfort by installing a large indirect safelight—few items contribute so much to pleasant darkroom operation. Let a Kodak Utility Footswitch and Kodak Electric Time Control add convenience and precision to your enlarging. Assure yourself of thorough print washing, for permanence, with a Kodak Automatic Tray Siphon. Every step you take toward comfort and convenience is a step toward better prints, because small impediments and petty annoyances are always reflected in your work.

Brush up your technique and broaden your

knowledge with reliable reference material—a copy of "This Is Photography," a Kodak Reference Handbook, and the new Kodak Color Handbook (if it's an advanced book, but a mighty good one to grow up with; details are elsewhere in this Kodak Bulletin).

Search through the photographic magazines, find what photographic contests are current, and enter one or more of them. Competing for prizes or honors leads new zest to your camera activity. And don't be afraid to submit to any salons that attract you, even if you've never sent prints to a salon. Every veteran salon exhibitor was a beginner once.

Make up your Christmas gift list—and include cameras for other members of the

family. Photography is a lot more exciting when there's competition right at home—and it helps bring the family closer together.

Work out a decoration scheme or "picture gallery" plan for your den or recreation room, to utilize enlargements of your favorite pictures. One of the simplest plans is to run two grooved moldings around the room, one about 20 inches above the other, so that prints on 16x20 mounts can be slipped in, making a continuous band or frieze.

Build a shallow illuminator box to fit over the mantel in your recreation room or living room, for dramatic display of Kodak Opalure transparencies (you'll find all the facts on Opalure elsewhere in this Kodak Bulletin). An illuminator 14 inches high



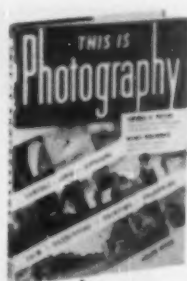
Now's a good time to check the chemical shelf . . . eliminate stale stuff . . . and replace it with fresh, reliable Kodak chemical preparations.



Be comfortable with a big Kodak Utility Safelight Lamp, Model C. It reduces eyestrain; makes operations much pleasanter.



Increase accuracy with a \$6.75 Kodak Timer With Tilting Base (above) or a Kodak Electric Time Control, \$13.50. The Kodak Timer splits seconds up to 60 minutes.

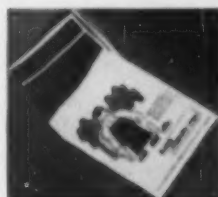


November's a fine month to brush up on photo facts and techniques. Get a copy of "This Is Photography" (\$2) and make the series of experiments it contains; they're fine discipline. Buy Junior a copy of "How To Make Good Pictures" (and then borrow it from him; there's a world of useful data in this famous 75-cent basic handbook). And by all means add the brand-new, comprehensive Kodak Color Handbook to your reference shelf. It has four great sections, covering color principles, color in the studio, color effects, and color films. Loose-leaf, too, for adding specialized sections. Only \$4.

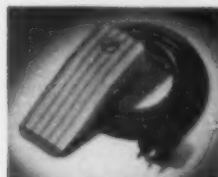


Let a three-way Kodak Combination Funnel add speed and neatness to your mixing and filtering of solutions. Only 85 cents, and a darkroom essential.

Protect your clothing with a Kodak Darkroom Apron—made of tough, moistureproof black vinyl plastic, with handy utility pocket and safety drip cuff. Strong white vinyl plastic binding protects all edges. Two sizes: Medium, 30x33 inches, \$2.25; Large, 36x45 inches, \$3.



Free your hands for dodging and other print manipulation with a compact, sturdy Kodak Utility Footswitch (below), \$10.



Bring your darkroom up to date now with the handy aids on this page. You'll be busy later on.



Continued on next page



and 44 inches long, with a couple of 40-inch fluorescents inside, will accommodate four 11x14 transparencies, or a panorama printed on four 11x14 sheets of Kodak Opalure Film. Could it be "live-it-taking"?

Try your hand at paper negative work. It's interesting, and has its uses even if your photographic tastes are "purist" rather than "pictorialist." There's a 12-page Kodak pamphlet, *The Paper Negative Process*, available to owners of the Kodak Photographic Notebook.

Take up table-top photography—a most entertaining and creative indoor activity for your camera. Maybe you've dabbled in it a bit; but this time, go at it seriously. There's no end to what you can do, and each idea gives your pictorial imagination

extra training. A bit of all three Kodak Portra Lenses will be helpful here (and in close-up work anywhere); and basic table-top advice is in the book "How To Make Good Pictures." Your boy or girl, by the way, should have a copy of that famous elementary handbook; it's only 75 cents.

Learn all the ins and outs of using extension flash for pictorial effect. The new Kodak Flashholder Model B and a Kodak Flashholder Extension Unit provide the equipment you need for use with any current Kodak camera that has a flash shutter. This does not include Brownie cameras; special inexpensive Flashholders are made for the flash-synchronized Brownies.

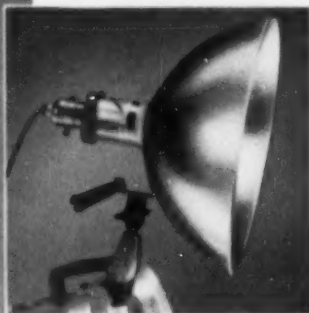
Plan a series of outdoor (and indoor) pictures that will capture the mood of Novem-

ber in your locality. Every month has a story to tell, in every part of the country where seasons change. To search out this mood and story, and capture it deftly on film, is camera adventure at its creative best.

Organize your color slides into natural groups for showing, so that your presentations to friends and guests will be smooth and entertaining. Gives you—and them—a lot more satisfaction. Kodaslide Compartment Files are a great help in this operation.

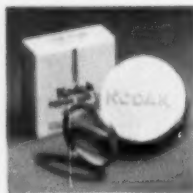
Supplement your color slides with titles—opening titles, end titles, and explanatory titles at strategic points in the show. These give a professional finish to your slide shows. Portra Lenses, or a Kodak Fluorite Enlarger with Copying Lights and Camera

If November weather shuts you in, use the opportunity to polish up your flood and flash techniques, and your knowledge of lighting. Kodak Vari-Beam Clamplight (\$9.75, below) and Vari-Beam Standlight (\$15, at left) are basic flood units; except No. 2 lamps, focus for wide or narrow beam. Use them in working out informal portrait and genre lightings at home.

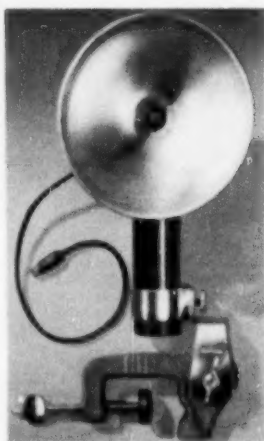


▲ Clamplight has sturdy padded clamp; won't mar furniture; adjusts to practically any angle you want.

Use of extension flash is increasing—you must learn about it to remain up to date. If you have a flash-synchronized Kodak camera, add a Kodak Flashholder, Model B, and a Kodak Flashholder Extension Unit, Model B. The Extension Unit is pictured here (it also includes an extension cord and a Kodak Two-Way Flashguard which provides a choice of diffused or undiffused light). Handy clamp permits mounting almost anywhere. Flashholder, Model B, is \$11.50; Extension Unit, \$12.75.



◀ Equip yourself for table-top, still-life, and other extreme close-up work with a kit of Kodak Portra Lenses—1+, 2+, and 3+. These can be used singly or in combination; a 2+ plus a 3+ brings you as near as 7½ inches, lens to subject, with the average camera. They come in sizes to use with practically any popular camera.



Prices are list and include Federal Tax where applicable

Back Adapter, facilitate title production.

Polish up your copying technique—it's a phase of photography you should know, not only for its direct returns, but also because it trains you in accurate procedures that carry over into all your negative-making and print-making. Learn to make clean, precise copies of line art, maps, printed matter, and halftone or continuous-tone material. Your Kodak Fluorolite Enlarger (and especially the Kodak Enlarging Ektar and Ektanon Lenses, specifically computed for high definition at the close ranges used in enlarging and copying) are excellent instruments for this work.

Take a whirl at photomicrography—a field that grows in fascination the farther you go into it. A simple lighttight collar, the Kodak

Microscope Attachment, equips your Kodak Fluorolite Enlarger for photomicrography, with a Kodak Camera Back Adapter substituted for the enlarger lamphouse.

For a change of pace in enlarging, if you've been printing everything crisp and needle-sharp—try experimenting with soft-focus, diffused, atmospheric effects. Very likely some of your autumn negatives offer perfect material for such interpretation. A Kodak Optical Diffusing Plate, 2-inch (used in front of the enlarger lens), gives you a wide range of effects, from almost-complete softness to very slight diffusion with a crisply defined underlying image.

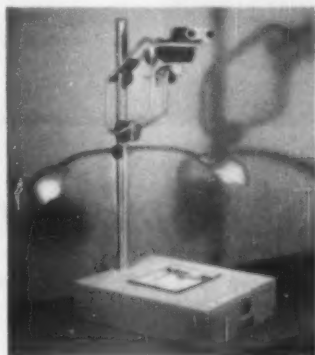
Make some super-size enlargements or photomurals. Your favorite Kodak enlarging papers all come in sheet sizes as large

The Kodak BULLETIN

as 20x24 inches, as few as 10 to a package, or as many as 250. (If you want to go even larger, the same papers come in rolls up to 40 inches wide, and as short as 10 feet.) There's real chest-swelling satisfaction in a monumental scenic blow-up from one of your own negatives... a thrill you can understand only after you make such a print.



Start this winter with a truly modern enlarger—a Kodak Fluorolite. The Fluorolite's famous "integrating sphere" (illuminating system, full range of controls, high adaptability, exceptional sturdiness, make it top choice. \$112.50, less tax.



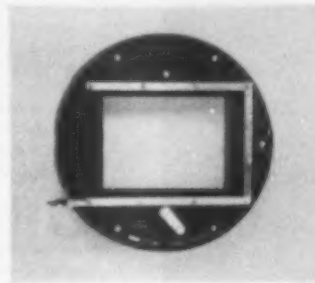
Not just an enlarger, but the basis of a complete photographic system—that's the Kodak Fluorolite. Here, the enlarger is set up for 35mm. copying and slide-making (two fluids, by the way, you should explore). Bellows assembly is completely removable and fits a Kodak Fluorolite Camera Back—add that accessory and a Kodak Fluorolite Camera Back Adapter (below) and you have a first-rate 2 1/4x3 1/4 view-type camera.



Here's another Fluorolite adaptation. Remove the enlarging lens, substitute a Kodak Microscope Attachment, put on a Back Adapter—and you're ready for photomicrographic work. It's just one more of the many "plus" potentialities.



November's a good time to put your slides in order—add titles—organize all the transparencies for winter showing. The new Kodaslide Compartment Film (above, \$3.75) is especially convenient—both for arranging the slides and keeping them in order for projection.



Titles help slide shows—and they're easy to make. Add the Kodak Fluorolite Camera Back Adapter (above) to your Kodak Fluorolite Enlarger—and you can shoot four 1x1 1/2-inch titles at one time on 2 1/4x3 1/4 Kodachrome or Kodak Ektachrome Film.

NOW—Opalure

Kodak Opalure Print Film is a new sensitized material of rare potentialities. Basically, it's Kodak Opal emulsion coated on a white film base similar to that used for Kodachrome Prints. With normal exposure and development in Kodak Selectol Developer, it yields warm-tone prints of exquisite surface quality. With plus-normal exposure and full development, it yields superb prints for viewing by transmitted light—rich, brilliant "translucencies" with extraordinary range of tonal gradation.

You'll want to try it for extra-special exhibition prints (either developed straight, or toned a rich gold-brown in Kodak Gold Toner, or striking reddish-brown in Kodak Selenium Toner). You'll also want to make prints for rear-illuminated display as home decorations.

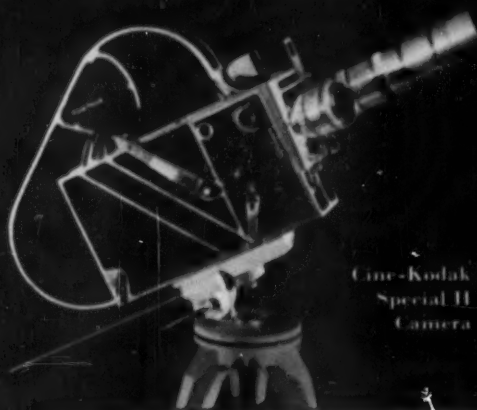
Since it's film, the cost is higher than for paper—\$6.80 for ten 8x10 sheets; \$12.75 for ten 11x14 sheets. But wait until you see the prints!

★ All prices in this Kodak Bulletin are subject to change without notice.

Ever make movies?
See next page



Kodak



Cine-Kodak
Special II
Camera

The "Special II" is the camera

There's just no comparing this superb, top-of-the-line Kodak motion-picture camera. It's lengths ahead in built-in features . . . in filming range . . . in capacity for special effects. It's far and away the world's most versatile 16mm. movie camera!

Name your cinematic effect—the "Special II" makes it possible . . . through controls that are part of the camera itself. Fades, dissolves, mask shots, varied-speed movies, animation . . . and others . . . are easy, in-the-camera operations with this unique 16mm. motion-picture maker.

Fully capable . . . amazingly precise—yet a camera that retains much of the ease and all of the operating economy of home movie cameras, the "Special II" is with excellent reason the top-choice camera of the movie experts.

Complete with 100- or 200-foot film chamber . . . with $f/1.9$ or $f/1.4$ Kodak Cine Ektar Lens . . . it's priced from \$898.50, including Federal Tax.

For those who want the finest

IN 16mm. MOTION PICTURES

Kodascope
Pageant
Sound
Projector

The "Pageant" is the projector

It's Kodak's newest . . . Kodak's finest . . . lightweight sound projector!

Through wonderful new developments in design and construction, the "Pageant" couples the convenience in handling of "midget" projectors with the quality of performance of full-scale machines. Though it weighs under 33 pounds complete, though it's fitted in a case scarcely larger than an overnight bag, the "Pageant" offers everything you'll need for superb 16mm. sound—and silent—projection.

Quality features by the score—fast 2-inch $f/1.6$ Luminized lens with field flattener . . . 750-watt lamp . . . takes accessory lenses, a 1000-watt lamp, for unusual conditions . . . built-in microphone jack . . . 7 watts of undistorted amplifier output on AC . . . big 8-inch speaker . . . maximum stability of film at the scanning point assured by a silicone-oil-damped roller . . . Fidelity Control focusing of the scanning beam . . . AC-DC operation . . . and many others.

Even the price is a feature—just \$325, complete.

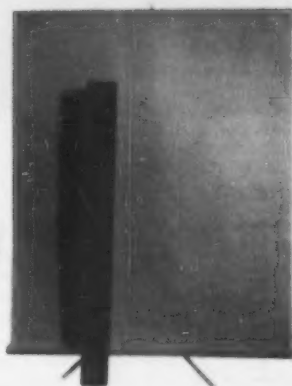
Prices are subject to change without notice.

EASTMAN KODAK COMPANY
Rochester 4, N. Y.

HOW TO

MAKE YOUR OWN PORTABLE BACKGROUND

by Ray Hicks



THE EASIEST, most simple way to assure that you always have a suitable background for home portraits is to carry one along. It will save you all the trouble of looking for plain wall space . . . and moving half the furniture in the living room if you are lucky enough to find one.

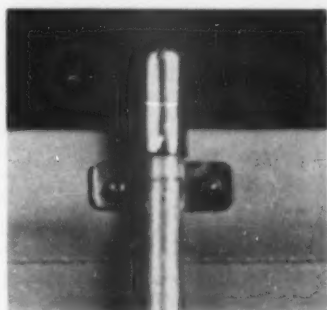
The following list of material is all you need to build yourself a background and carrying case that will solve the problem.

- 2 yds. 54-inch window shade material
- 1 wood block $\frac{3}{4}$ x 2 x 4 inches
or
- 2-inch piece 13/32-inch brass tube
- 8 feet cardboard tube, 5 inches diameter
- 10x5-inch, $\frac{3}{8}$ -inch plywood
- 5x5-inch, $\frac{1}{8}$ -inch masonite
- 1 Victor light stand

The window shade material comes in matte finish in colors from dark green to white. Take your choice and

have two yards made up with wooden pull strips sewed in both ends.

Now, take the wood block and drill a $\frac{3}{8}$ -inch hole in the edge of the block to a depth of $1\frac{1}{2}$ inches. Tack the block to either end of the window shade with the hole pointing downward. In use, simply slip the $\frac{3}{8}$ -inch rod of the Victor light stand in this hole and adjust your backdrop to any height.



Mounting for background

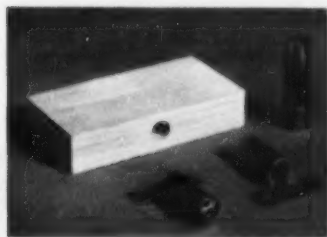
The metal tube is suggested for those who would like less bulk in the mount. Make three pie-cuts with a hack-saw across the top of the tube to the depth of $\frac{1}{4}$ inch. Remove every other one of the six tongues thus made. Bend the three remaining tongues inward and solder for strength. On the opposite end of the tube, cut across the diameter $\frac{1}{2}$ inch from the bottom. Split this portion and flatten it out to form two wings. Drill two holes through the wings and the wooden

shade strip and bolt the hanger in place.

A carrying case is made from the cardboard tube. (Usually you can get one from a linoleum dealer.) A permanent bottom is made from a disc cut from a piece of $\frac{3}{8}$ -inch plywood just large enough to fit snugly in the opening. Glue and tack this in place. For the cover, cut another plywood disc and a masonite disc $\frac{3}{8}$ inch larger all the way around. Glue them concentrically to form the cover.

For appearance's sake, you can cover the entire case with leatherette purchased at a book-binding or upholstering shop. In covering the case, run the seam lengthwise and overlap it about $\frac{1}{4}$ inch. Extend the material about $1\frac{1}{2}$ inches beyond the edge of the case, notch them and glue to a smooth finish.

If a handle is added, the case should be balanced with the background and stand inside to determine proper placement.



Sockets are either wood or metal



Finishing the ends of case

THE SIX-STATES EXHIBITION

"in the right direction"

Axel Bahnson, F.R.P.S., A.P.S.A.

(Visitor to the judging)

"personal, fresh, meaningful"

Arthur S. Siegel

(Consultant and judge)

THE SIX STATES exhibition, which was held at the Milwaukee, Wis., Art Institute Sept. 8-30, was an attempt to focus attention on standards of widening our experiences and so to establish a new kind of photographic show.

The Six States show is a step in the right direction, but it was evident after watching the judging for a short while and later in going over the accepted prints that a great deal more time should have been allowed for entering prints. None gave evidence of having been made for the show. It seemed that the makers had gone to their print drawers, looked through the prints on hand, weighed their possibilities and made their choices. None showed a conscientious effort to ful-

fill the suggestions of the prospectus. The show's purposes were to "help re-establish standards of quality in photography, enable the general public to see photography as a creative and communicative medium, offer an annual opportunity for the creative photographer in the region to show his work and to accumulate, by purchase, fine photographs for the permanent collection of the Milwaukee Art Institute."

Some Only "Exercises"

A great deal of the work I would personally consider exercises in intellectual virtuosity. I hope that the hanging will be commensurate with the efforts that the judges put on it. Otherwise, it might come in for ridicule by

EVERY PHOTOGRAPHIC EXHIBITION is the physical embodiment of two systems of values. Each photograph entered represents a photographer's relationship to the world of objects and ideas. The image is a mirroring of what he believes, and the photographic statement is a strong reflection of mind. For in a deeper sense the old saying, "A photograph does not lie," is true. Although in transforming the dynamic three-dimensional world of objects into the static two-dimensional world of images the photographer always distorts, conceals and exaggerates, he can only make an image reflect what he thinks. The photographer photographs his own image, and in

this sense "photographs do not lie." If the photographer is honestly searching, exploring, probing beneath casual surface relationships to deeper meanings, it is apparent in his work. If he is dishonest, complacent, imitative, shallow, these values are equally obvious in his work.

The second system of values in a photographic exhibition consists of the beliefs of the jury. They are truly named judges, for their function is to select those photographs which shall pass and those which shall perish. This selection is based on their collective belief of what constitutes significant photography. The final exhibition is a reflection of their beliefs, limited by



Ferynk

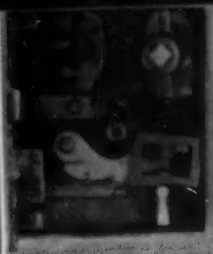
McDougall

Ross

McDougall



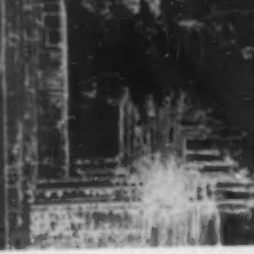
Axel Bahnson



Diffenderfer



Kirkland



Massopust



Downs

what pictures were available. The jury of the Six States exhibition was selected because they held in common the following beliefs:

1. Photography can be a powerful personal means for communicating ideas.
2. Photography is a tool for exploring the relationship of man to nature and man to man.
3. New times demand new visual images.
4. Photographic craftsmanship must keep pace with creative seeing.
5. Photography will develop its

inherent possibilities by exploiting its own means and not by imitating other older arts.

Mature Judges

The men who judged this exhibition are professionally concerned with photography. They are mature men familiar with modern manifestations of the mind in other fields of art and knowledge. They are intensely concerned with the problem of giving the creative photographer in any field a showcase for his work, thus bringing to the attention of the public the powerful potentialities of photography. The selection of prints for the exhibit was accomplished by carefully consid-

ering every entry in the light of the above common beliefs.

What were the results of this meeting of the judges' and the photographers' values?

On the positive side it was exciting to discover that there was a sizeable group of unknown photographers in the six states area who were making personal, fresh, meaningful use of the photographic medium. Their craftsmanship was on a high level and the integrity of their images was a pleasure to experience. They showed eagerness to understand their environment and not escape its challenge. Their portraits showed discontent with the clichés of the usual commercial or pic-

the layman not accustomed to a diet of mental gymnastics.

Besides Arthur S. Siegel, free-lance photographer and designer, the judges were John Morris, picture editor of *The Ladies' Home Journal*, and Roy Stryker, director of the Pittsburgh Photographic Library. The manner in which they operated could well be emulated by the more conventional salons. There was no light box, instead large tables were placed around the room. There was no audience. The prints were gone over informally and discussed in relationship to each other. They were grouped and regrouped until the desired balance was achieved—in the jury's own words, a process of editing a show—and it was most commendable.

The language used by the judges was really no different than that used by judges at conventional salons, except that the jury used two-bit words instead of the two-cent variety. They had their clichés that covered a multitude of prints of uncertain caliber.

Some of the picture series hadn't

gone beyond Farm Security Administration days. They were statements of given conditions, but didn't go on to give cause and effect. I feel that a photographer must see the whole picture and present it to the best of his ability, not merely recording a momentary phase, but interpreting it in the light of contemporary events.

Greater Variety Needed

The influence of the Chicago Institute of Design was noticeable in the entries. It is to be hoped that in future shows of this type more diversified material will be submitted.

The abstractions in color were exceptionally good. Carl Kulick's work, in particular, appealed to me. Though not true color photography, but multiple toning, his pictures were effective and stimulating. John Szarkowski had one picture worthy of mention—an unaffected study of Max Weber—but his other studies gave indications that his subjects were trying too hard to be intellectuals. Frank Scherschel's dramatic series on a CIO convention

was timely, although a few shots could have been eliminated because of camera mugging on the part of the principals in the pictures.

The outstanding series, both technically and intellectually, was made by Walter Allen of Chicago, who submitted 5x5 prints beautifully done, provocative and thoughtful. Lyle R. Mayer's series on the Madison-Pulaski traffic situation, though excellent, seemed a little forced and without personal conviction. "The Night Has a Thousand Eyes" by a member of the staff of the *Milwaukee Journal* is indicative of the originality and high standards attained by members of the *Journal* staff on assignments. It is a picture hard for me to forget.

"Parking Lot, Minneapolis," by John M. Beauchamp, is a beautiful and sensitive print without too great a sociological message.

This exhibition, as with so many others, would have been far more effective with 50 prints, rather than with the 175 chosen from the more than 1100 submitted.

torial work and an attempt to picture a subtler understanding of the human being and his interactions with his environment.

Much evidence was presented of the influence of what might be called the new scientific landscape. Through his interest in scientific objects and their images, the photographer of 1950 is attaining a new awareness of form, squarely based on the revelations in the scientific image of new relations of line, tone and color. This insight is being exploited by a new interest in mechanical and optical methods of producing new images of familiar objects. This is in marked contrast to the manual methods, forced arrangements and sentimental approach of the pictorialist.

Altogether the exhibition demonstrated that a high level of personal integrity and intensity exists in a sizeable group of midwest photographers. It is to be hoped that this exhibition will encourage those who try to do honest photography and that their work will be discovered in future exhibits. At this point the creation of a new type of exhibition is perhaps more important than any single picture in the exhibition.

Total Effect Primary

On the negative side, the pictures not selected showed the overpowering stranglehold that the "salon system" has upon the eyes and mind of the average photographer. It was depressing to see a parade of boring, dishonest, cliché, pointless, formula, derivative, cheap, unfelt images. The point system of judging has led to a rigid type of seeing, based on pleasing the prejudices of the same group of nineteenth-century oriented judges. The statistical analysis of the parts of a picture is not a measure of its value as a whole. The formal organization, the technique, the subject matter of a photograph may be fine considered separately, yet the totality may be insignificant. For the total effect of an image is greater than its separate parts.

In the industrial and commercial entries the heavy hand of the art director was all too obvious. The clean and polished workman, the Hollywood "glamour" lighting, and the arty organization, all combined to produce insincere pictures of industry and products. Some day a greater number of art directors will find that they can sell more products and make a more

powerful presentation of their industries by hiring creative photographers and allowing them to make images that are discovered, rather than dictated by a pencil or previous use.

Too frequently the prints showed inadequate understanding of the technical means. If photographers would buy a Weston or Adams print instead of one more gadget, the standards of photography might rise. The ability of the miniature camera to reveal deeper meanings, was surprisingly unrepresented.

The few color photographs proved that in this field photography is in its infancy. Few photographers have any concept of color and its relationship to subject matter and form. It would be well if photographers were to familiarize themselves with the color knowledge which painters have so painfully amassed through the centuries.

The judges were disappointed that so few people were observing their own city, town or farm. It is not nec-

essary to go to an exotic or foreign place in order to make significant photographs. There were hardly any photographs of farms or industry. There were many photographs of babies and children, but they all looked like mummies, not the human personalities they are.

Whole Areas Overlooked

Another lack was significant sport pictures, a very important part of the American scene. Pictures of educational activities were completely missing. Apparently the colleges and universities of the area have yet to discover that photography is as potent a means of communication as the written word.

The Six States exhibition proves that creative photographers exist in this area and are producing significant work. They deserve the encouragement of this new type of open exhibition, judged by men of integrity and experience.

The language of photography has become the most widely used non-verbal means of communication in the twentieth century. Movies, still pictures, and now television dominate the field of man-created images. Billions of snapshot, record, illustrative propaganda, news, and scientific photographs pour out in an ever-increasing flood. A thin stream of this output has permanent record value. A few droplets obtain an intensity of personal vision through the discovery of new subject matter or the reorganization of familiar subject matter into new forms. This type of photography we may call creative photography.

In every means of communication, words, art, mathematics, . . . wherever signs and symbols are used . . . style and quality are produced by men's minds. This is equally true of machine-produced images, for behind every photograph is a man's sensitivity. Meaningful photographs, like all works of art, are projections of what is in the man's mind.

Isolating and selecting subject matter through use of light, camera, and film, the photographer constantly shows his innermost thoughts. In the case of great photographers, this quality of mind produces images that reveal the world in a contemporary and emotional manner. Looking at their pictures enlarges our world of experience.

The SIX STATES EXHIBITION is a declared attempt to focus attention on this standard of enlarging our experience, and in doing so to establish a new kind of photographic show. The jury is composed of men whose experience in using and creating photography has put them in a position to recognize camera work which has meaning, integrity and stems directly from the creative process. And this announcement is a direct appeal to all serious photographers who are eligible to submit their work.

The Milwaukee Art Institute, generously supported by the Boston State, and with the cooperation of a working committee from the Milwaukee Photo Pictorialists, proposes, therefore, to have a photographic exhibition with the following purposes:

1. Help re-establish standards of quality in photography.
2. Enable the general public to see photography as a creative and communicative medium.
3. Offer an annual opportunity for the creative photographer in this region to show his work.
4. Accumulate, by purchase, fine photographs for the permanent collection of the Milwaukee Art Institute.

ARTHUR SIEGEL,
Consultant for the Exhibition.

BURTON CUMMING,
Director, Milwaukee Art Institute.

STATEMENT FROM THE ANNOUNCEMENT

NOTES AND NEWS

STEEL TANKS FOR COLOR

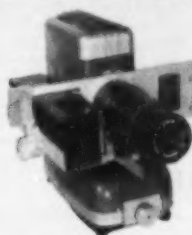
1 Those who process their own sheets of color film will be interested in the Carr line of stainless steel equipment for this purpose. A full line of tanks from a 1-quart, 4 x 5 model up is offered, and the company says these tanks are not soldered or spot welded, but "atomic-hydrogen-arc" welded, which eliminates a second metal and creates a one-piece tank.

These tanks will not be attacked by color chemicals and are virtually a life-time investment, with prices beginning under \$5 for the small size, and going up to include a complete 3½ gal., 8 x 10 size.

Black-and-white workers too should find these tanks a good investment, as well as the 24-gauge seamless trays which are also available. Check this number for literature.

SEMI-AUTOMATIC SLIDE CHANGER

2 A new semi-automatic slide changer, the Selectron-Semimatic, now provides many of the fully automatic features at a substantial savings. A product of



the Three Dimension Co., the changer handles all 2x2 slide mounts—cardboard, glass or metal—in any combination and without adjustments.

In one precision-smooth operation, the Semimatic selects the slide, centers it in focal plane, projects it and returns it to its original position. A shutter cuts out all light while the slides are being changed. No stacking is necessary. The slides are filed in special reversible Selectrays which select any of 30 slides by the simple turn of a knob.

TDC'S SLIDE A & C's

3 A booklet designed to give amateurs some of the important A & C's in the preparation and projection of color slides is now being distributed by the Three Dimension Co. of Chicago. It is entitled "Picture Perfection Comes With Projection."

What camera? What film? What light? These are a few of the many questions answered in this helpful booklet. It outlines the planning of slide sequences and how to give effective slide presentations. Also included are descriptions of the TDC equipment available, ranging from budget-priced models to the most complete professional models.

READERS' SERVICE DEPARTMENT . . . Here is how you can obtain up-to-the-minute information on photographic supplies and equipment. New products announced by manufacturers are listed here, and on the page following, is a blank you can fill out and mail to AMERICAN PHOTOGRAPHY for more complete information. Use this service; there is no cost or obligation.

COMBINATION PRINTING, PROOFING PAPER

4 To meet the requirements for a paper surface which is most generally useful when finished black-and-white prints are desired from Kodak Ektacolor negatives, the Eastman Kodak Co. now has Kodak Ektacolor BW paper.

Available in E surface, single weight, the new paper is intended for finished work as well as for proofing. The Kodak Ektacolor BW proof paper, now discontinued, was intended for proofing only.

The new paper is obtainable in the same sizes and at the same prices as the old type. The sizes range from 8x10 inches to 16x20 inches.

WALL LAMP PHOTO FRAME

5 With the Pix Light and a common picture frame, an entirely new way to display photographs in the home has resulted, according to Moviette, Inc.

When the photograph is illuminated with the new unit, it also provides soft indirect room lighting or it can be used as a reading light.

Pix Light, constructed of light metal, is a shadow box frame 11½x13½ inches. It hangs flush against the wall, only 2½ inches in depth. Complete with tubular bulbs and long line cord, it operates on both ac and dc.

AUTOMATIC EXPOSURE METER

6 An automatic exposure meter, the Siximat, establishes new concepts of simplicity, speed in operation and sensitivity, according to the maker, P. Gossen.

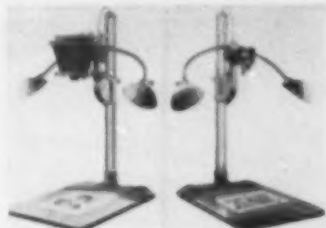


Among the features of this new meter is automatic calculation of the correct f/ stop for every shutter speed. The f/ stop scale ranges from f/1.4 to f/45, shutter speeds from 1/1000 to 30 seconds for stills and 8, 16, 32 and 64 frames per second for movies. An ingenious memory-perfect device retains reading automatically. The sensitivity range is from 0.1 to 4000 foot-candles.

The Siximat is being marketed by the Photographic Division of Mita Corp.

VERTICAL TITLE AND CAMERA STAND

7 A combination vertical title and copy stand useful in all fields of photography has been produced by DeJor-Amsco Corporation. A movie camera may be



used on this stand for filming titles or a still camera for copying photographs, blue-prints or documents. Laboratories will find it useful to photograph gross specimens, small machine parts or scientific apparatus.

The title stand consists of the baseboard, vertical post and adjustable bracket. The camera is screwed by means of its tripod socket to the bracket which may be easily raised or lowered and locked at any position. The camera faces downward toward the laminated baseboard. The upright column is 2¼ inches in diameter, of chrome-plated steel for perfect rigidity.

To illuminate the title which is set up on the baseboard, a twin light unit is available which clamps under the tripod screw knob on the bracket.

120 ROLL HOLDER FOR LARGER CAMERAS

8 New models of the 120 Graflex roll holder which will fit any 3½x4½ or 4x5 camera equipped with Graflex or Graflex back is the good word from Graflex, Inc.

For owners of cameras fitted with Graphic backs, a spring kit replaces the focusing panel and holds the roll holder firmly in place. On larger cameras, the retainer screws permit finger tightening and a quick vice versa of roll film and sheet film.

Without operating two cameras, it is possible to use a large negative for black and white shooting yet shift at any time to 120 color film.

Two models of the 120 roll holder are available for making 12 square or 8 2¼x3½ pictures. The film can be automatically stopped and centered in the correct position for exposure. Thus, series of pictures can be shot at high speed and the film advanced without reference to ruby windows. A film

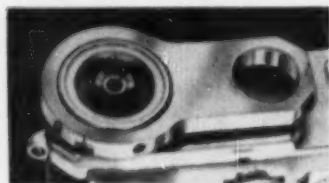
counter shows the number of exposures made and the winding knob "free-whelm" at the end of the film as a signal to reload.

The roll holder is equipped with a dark slide so that it can be removed from the camera between shots without fogging the negative. This permits shifting to another roll holder loaded with a different emulsion or to a sheet film holder or pack at any time.

The new roll holders for larger cameras come complete with masks for adapting the optical view finder or ground glass focusing panel to the field of view recorded on the smaller size film by the various standard lenses found on these size cameras. They are made for Graflex as well as Graphic.

Contax Rapid Winder

9 For rapid sequence photography made easy for Contax II owners the American Photographic Instrument Co. of New York City presents the Pic Contax



Rapid Winder. The Rapid Winder can expose 36 frames in less than a minute without necessarily removing the camera from eye-level shooting position. It is precision made of tempered Duraluminum, machined from a solid plate and "enodized" to make it extra hard, durable and scratch proof.

THREE-COLOR METER

10 Latest development of Photo Research Corp. is a new Spectra Three-Color Meter. This meter is for accurate determination of the color of a light



source and finds one of its major applications in the field of color photography and cinematography, where the illuminant must be of the color to which the film has been balanced.

The new Spectra color meter has two notable changes: the instrument measures the proportionate amounts of all three primary colors instead of only two; the amounts of these colors are no longer expressed in complicated Kelvin temperature units but in a new log unit known as the Spectra Index, which brings illuminant, film and correction filters into a simple, direct relationship.

FIXED-FOCUS MAGAZINE 8

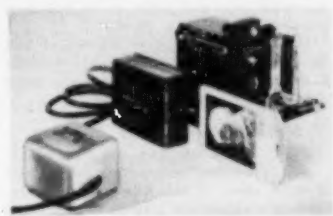
11 For those who like the convenience of magazine loading and the simplicity of a fixed-focus lens, the Eastman Kodak Co. has introduced a new version of its Cine-Kodak Magazine 8 camera. Body and mechanism are the same as those of the current Magazine 8 with f/1.9 lens but the

finder has been re-designed for use with a fixed-focus lens, plus an interchangeable telephoto lens for use where telephoto effects are desired.

The new model is fitted with a 13mm f/2.7 fixed-focus Kodak Cine Ektanon lens. Luminized, having the same bayonet-type mount as is now on the Magazine 8 camera. For telephoto movie making the Kodak Cine Ektanon lens, 30mm f/2.5 or the 40mm f/1.6 Kodak Cine Ektar lens are recommended. They call for a Type M Kodak cine lens adapter. The view finder includes a rectangle indicating the field of either of the new, longer focal length lenses.

DEVICE FOR DIMINUTIVE DARKROOMS

12 Latest product from the engineering laboratories of Graflex, Inc., is a portable cold light pack which greatly extends the versatility of any Speed, Crown,



Century Graphic or other press-type camera.

Known as the Graflex Back and featuring the Aristo cold light, this accessory fastens to the back of a Graphic in place of the focusing panel to convert the camera into an enlarger or transparency viewer. Since any standard camera lens can be used

Readers' Service Department

THE PURPOSE of every magazine is to help its readers and to give them information. Have you ever read through an issue of any publication, wished for additional facts on something mentioned in the editorial columns or the advertisements . . . and were never satisfied?

Through our Readers' Service Department you may solve this perplexing problem. Additional material on anything mentioned in the columns of AMERICAN PHOTOGRAPHY is yours for the asking. Follow the printed instructions and the material will be sent to you free of charge.

INSTRUCTIONS

1. The blank in the corner of this page is the right size to paste on a penny postcard or mail in an ordinary envelope. Write your request on it and mail to American Photography, 421 Fifth Ave. So., Minneapolis 15, Minn.
2. The columns of numbers and squares refer to the numbered paragraphs in the "Notes and News" section. To obtain information on any of these, merely check the corresponding number on this form.
3. The remainder of the form is for your use in requesting information on anything mentioned elsewhere in the magazine.
4. If you prefer to send in a general comment or a question not in reference to this issue of American Photography, do not use this form. Send a separate letter to the Editor.
5. There is no limit to this service, but to expedite handling here, we ask that you request only that literature or information in which you have a real interest. Thank you.

Readers' Service, AMERICAN PHOTOGRAPHY, 421 Fifth Ave. South, Minneapolis 15, Minn. Please arrange to have information on the following items mentioned in your NOVEMBER issue mailed to me at the address below.

NUMBERS BELOW REFER
TO NOVEMBER

"NOTES AND NEWS" Name _____

☐ 1. ☐ 6. ☐ 12.

☐ 2. ☐ 7. ☐ 13.

☐ 3. ☐ 8. ☐ 14.

☐ 4. ☐ 9. ☐ 15.

☐ 5. ☐ 10. ☐ 16.

☐ 11.

St. & No. _____

Town _____

Zone _____

State _____

PEERLESS Birth Day Sale

IT'S OUR SEVENTEENTH BIRTHDAY!

We're turning the tables—the gifts are on us. This outstanding assortment of bargains is new and used Camera Values is your piece of the birthday cake. Our Trade-ins are more liberal than ever. Remember—your protection is the Traditional PEERLESS Money Back Guarantee PLUS Ten Day Trial AND Service on your purchase for a whole year!

Used 35mm CAMERAS

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

Used ROLL FILM CAMERAS

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

Used 8mm CAMERAS

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

Used 8mm PROJECTORS

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

Used PRESS CAMERAS

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

Used ENLARGERS

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

Used CONTAX & LEICA Cameras

AGFA KABAT II, 12.5 mm, S.P.	69.00
AGFA A, 12.5 mm, S.P.	9.00
AGFA D1, 12.5 mm, S.P.	39.00
AGFA E, 12.5 mm, S.P.	39.00
AGFA F, 12.5 mm, S.P.	64.00
AGFA G, 12.5 mm, S.P.	79.00
AGFA H, 12.5 mm, S.P.	79.00
AGFA I, 12.5 mm, S.P.	79.00
AGFA J, 12.5 mm, S.P.	79.00
AGFA K, 12.5 mm, S.P.	79.00
AGFA L, 12.5 mm, S.P.	79.00
AGFA M, 12.5 mm, S.P.	79.00
AGFA N, 12.5 mm, S.P.	79.00
AGFA O, 12.5 mm, S.P.	79.00
AGFA P, 12.5 mm, S.P.	79.00
AGFA Q, 12.5 mm, S.P.	79.00
AGFA R, 12.5 mm, S.P.	79.00
AGFA S, 12.5 mm, S.P.	79.00
AGFA T, 12.5 mm, S.P.	79.00
AGFA U, 12.5 mm, S.P.	79.00
AGFA V, 12.5 mm, S.P.	79.00
AGFA W, 12.5 mm, S.P.	79.00
AGFA X, 12.5 mm, S.P.	79.00
AGFA Y, 12.5 mm, S.P.	79.00
AGFA Z, 12.5 mm, S.P.	79.00

ALL ITEMS LISTED ARE USED, SUBJECT TO PRIOR SALE!
PLEASE ADD POSTAGE ON ITEMS NOT MARKED "POSTPAID".

Brand New

DISCONTINUED

Lightweight Model

MINOX II

- 11.5 Coated Lens
- Built-in Filter
- Speeds to 1/1000 sec.
- Focuses from 8" to infinity

List \$174.42

75.00

OMEGA D2

4x5 ENLARGER

with 3 1/2" x 4 1/2" lens and Double Condenser and Lighting System

149.50



PEERLESS CAMERA STORES

138 EAST 44th ST. • NEW YORK 17, N. Y. • MU 7-1000



SAVE \$105.00!

KINE EXAKTA II

with Zeiss Ikon 1.5 Coated F2.8/57mm Lens and Built-in FLASH UNIT

List \$275.00

169.50

118.00

YOU SAVE 90.20

Latest Model 4x5 PACEMAKER

SPEED GRAPHIC

PRESS OUTPUT



- 11.5 Coated Zeiss Ikon Lens
- 4x5 Format
- Rapid Shutter
- Built-in Flash
- No Mirror Flashes

List Price \$278.70

188.50

YOU SAVE \$175.83

BOLEX H16

16mm

Movie Camera

with 3 Coated LENSES

• Triplet

• Triplet

• Triplet

• Triplet

• Triplet

• Triplet

• Triplet

• Triplet

• Triplet



List \$465.43

289.50

MAIL THIS TODAY

Dept. A11

PEERLESS CAMERA STORES

138 East 44th Street, New York 17, N. Y.

Confirm:

☐ Send me at once your latest FREE BROCHURE listing and illustrating bargains in cameras and equipment from your stock of over 100,000 photo items.

☐ I want to trade my _____

_____ for a _____

to make
Christmas
last longer...

give
fine papers...



...the choice of
discriminating photographers
everywhere... unique
because of its surface, its
tonal qualities.



...chloro-bromide enlarging
paper with a wide range of
full, rich, warm tones...
interesting surface
textures... different.



...versatile, flexible chloro-
bromide paper... warm
black to reddish tones by
varying the development.



Write for free folders
describing these and
other fine Gevaert
products and the name
of the nearest dealer
stocking fine Gevaert
papers and films.

The GEVAERT COMPANY
of AMERICA, Inc.
123 WEST 35th STREET
NEW YORK 19, N. Y.
IN CANADA: GEVAERT LTD.

for enlarging or projecting, a considerable saving
on cost of special equipment is effected.

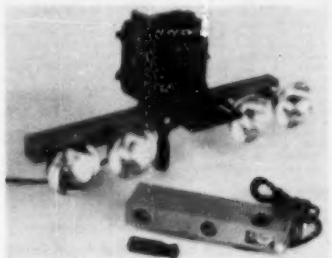
Because of its small size and light weight,
the Graffarger is ideal for travelers, news
correspondents and others who must carry
their darkrooms with them and set up in
closets and other cramped quarters.

The color temperature of the Aristo cold
light is correctly balanced for lighting trans-
parencies and gives off no heat to buckle
film or harm camera or lens. This lack of
heat also will be appreciated by those forced
to work in warm, confined darkroom space.

The new Graffarger is available in 2½x3½,
3½x4½ and 4x5 sizes. It is made for Graflex
as well as Graphic cameras.

ATTACHABLE LIGHTING UNIT

13 A portable, directional lighting
unit, the Top-Flight Fold-A-Lite,
made expressly for Penn Camera, is now
available for still and movie camera use.



A compact lighting unit using four re-
flector-type flood lamps, the Fold-A-Lite can
be attached to any movie or still camera.
This permits great flexibility since the light
source follows the camera in whichever di-
rection it may be pointed. It can also be
hand-held or attached to any tripod or to a
separate stand.

Made of pressed steel, the unit weighs
only three pounds and can be folded together
to reduce its length to 14½ inches for com-
pact storage and easy portability. It is sup-
plied with six feet of heavy-duty power cord.

A single on-off rotary selector switch pro-
vides fingertip control for a choice of three
light combinations: all lights at half intensi-
ty for focusing and adjustments; all lights
at full intensity for exposure; two lights at
full intensity where less light is required.

NEW IMPORTED REFLEX

14 Recently introduced to this coun-
try by the American Equipment
Co., Inc., Jersey City, N.J., is the Flexaret
III, a 2½x2½ reflex camera.

Outstanding operational features include
an automatic film transport lever which
forwards the film at a single half-turn of
the crank and records the exposure number
on the film counter at the side of the cam-
era; automatic film loading which brings
the first exposure into position by four
turns of the crank after the camera is
closed; a convenient focusing lever, situ-
ated in front of the camera for ease of op-
eration by right- or left-handed persons.

The precise three element L/3.5 hand
coated Mirax taking lens and the corrected
L/3 viewing lens assure sharper focusing be-
cause of the greater depth of field of the
smaller aperture taking lens; hence, a pic-

ture that is not too sharply focused in the
L/3 viewing lens is more apt to be in sharp
focus at L/3.5. An extra large magnifier
covers the entire ground glass image.

"Push-Pull" Viewer

15 With the new "Multipix 20" View-
er it is now possible to view 20
slides in 20 seconds. The Paralex Instrument



Co. of New York City, designer of the
Viewer, claims that it is the only hand
viewer with "push-pull" automatic action.

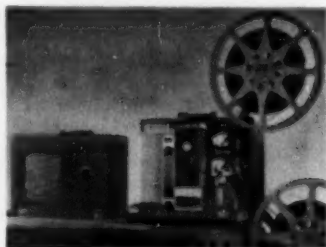
The 20 slides can be easily loaded into
the viewer and after viewing are returned
to their original sequence. A novel arrange-
ment permits re-viewing by merely sliding
a button, making it unnecessary to remove
the slides.

Clarity of image is attained by the quality
of the diffusion plate and an adjustable
focus lens which magnifies the image size
five times, plus giving a simulated third di-
mensional effect.

The Viewer will handle any transparency
in the original 2x2 cardboard mount. Al-
though it will not handle glass the company
claims that the construction of the Multipix
eliminates the need for extra heavy mounts.

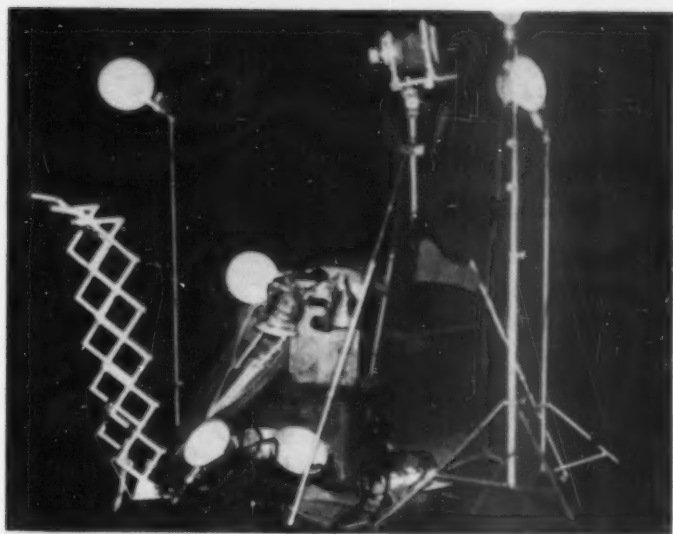
LIGHTWEIGHT SOUND PROJECTOR

16 First lightweight 16mm sound pro-
jector to be produced by the East-
man Kodak Co. is the Kodascope Pageant
sound projector.



Weighing less than 33 pounds, the pro-
jector operates without converter or extra
equipment of any kind on either ac or dc.

Both the speaker and projector are built
into the carrying case for greater ease in
handling and use. The speaker can be used
up to 35 feet from the projector with the
cord supplied. An additional 35-foot exten-
sion cord is available separately.



Complete equipment for location shooting may be handled by the photographer from car to job by utilizing this

Folding Hand Truck

Not so very long ago Leonard Lyons in his column, "The Lyons Den," told a story about Roy Pinney, the well known magazine photographer. This



item told of Pinney's use of an ordinary golf-bag for carrying all of his location camera equipment.

Photographers working with the equipment needed for making standard commercial 5x7 or 8x10 negatives can't do much with a golf-bag. The tiresome transfer of equipment has

always been a headache and manual labor pure and simple, but not very simple!

Jasper T. Crawford, a leading photographer of Syracuse, N.Y., hit on an idea for a simpler method. Making note of the hand trucks used by porters in moving luggage, Mr. Crawford felt that these boys had something, and realized that here was an answer. This truck was strong and sturdy, yet built to collapse to stow away in a small space. Open, it automatically locked and could not collapse by accident. The collapsible feature makes it simple to place the truck in the baggage compartment of an automobile.

Now this alert photographer packs his equipment on this truck and rolls it to his car, doing in one trip a task that used to call for several.



You save \$50
on a



Save the need of buying a variety of cameras for your varying interests — use the B & J Speed Press, America's most versatile camera, for everything from fast-action sports shots to table-tops and portraits.

YOUR BASIC CAMERA

Use it as your basic camera — just start with a camera and a general-purpose lens; add special-purpose lenses and accessories as your special interests develop. The B & J Speed Press is the camera for you when you begin to get serious about your photography — and it's still the camera for you when you reach the professional class. It's the only camera made that offers so many features at so low a price. See it at your dealer.

SPECIAL!

Tix3½ B & J Speed Press, complete with 4½" F4.5 Voigtlander coated lens in a synchro shutter (1/25-1/200 & 8).

(Flashgun extra.) **98.50**

Complete with Lens, Only

4" x 5" Speed Press Camera has all the features of the Tix3½ size, plus a lightweight rugged airplane metal body, revolving back, sports and optical View Finders — 24 important features at the lowest price on the market. **\$69.50**

Lens, Lens and Flashgun...

ALL THESE FEATURES IN THE B & J SPEED PRESS

- Wide angle drop • Instant lens interchange
- Slide-rule type • View camera tilt
- Variable focusing • Fully hooded ground glass
- And many others



For 53 years
you've taught us
**Saving
Ways**

1897 1950
Burke & James, Inc.

FINE PHOTOGRAPHIC EQUIPMENT FOR OVER 53 YEARS
1271 S. Wabash Ave. Chicago 4, Ill. U.S.A.

GRIERSON'S

word
in
edgewise



Samuel Grierson, A.R.P.S.

IN LAST MONTH'S EDITION of this chit-chat I called my readers' attention to Roy Stryker, mentioning his new assignment in connection with photographing "life, activities, and achievements of the people of Pittsburgh and Western Pennsylvania." This month I find myself in a position to offer Mr. Stryker a hot tip on material available in his bailiwick. All he need do is take his equipment to a place named Wilkensburg, just east of Pittsburgh. It seems that the constabulary, if not the townsfolk themselves, are really on the ball in that burg. Amateur photographers touring the area are actually thrown into jail and put behind bars if they as much as show a box brownie! At least that is what happened to Robert and Edith Worth this past summer but, of course, the pair used imported cameras rather than the old reliable box and it is a well known fact that only foreign spies are so equipped! The town is right hep on morality however. Edith and Bob were given separate cells in the local hoosegow!

What really happened was that Mr. and Mrs. Worth, after spending the previous evening in the local hotel dining with friends, decided to picture, as Mrs. Worth puts it, "the wonderful chimneys, multi-colored smoke stacks, as well as the little houses nestled and cuddled in the hillside." This they started to do in the morning but they did not get far before the man with the silver star on his vest ran them in. Mrs. Worth, in her letter to me, mentions that no sign stating photography was prohibited in the area was to be seen.

I might add that the Worths are good, honest citizens of Nutley, N.J. They do not speak with an accent other than that acquired by the cliff-dwellers in the Orange Mountain area. Directing a question to operators of law and order in Allegheny County, I ask of what value to any foreign agent would be a photo of multi-colored chimneys and little houses cuddled and nestled in the Pennsylvania hillside? Well, Mr. Stryker,

Samuel Grierson, A.R.P.S., and Secretary of the Pictorial Photographers of America, (to note a few of the honors he has earned) contributes his informal monthly column on personalities and events in and around New York City. Mr. Grierson manages to keep up with almost everything that happens in that busy area, but will be happy to have you write him at 1155 Dean St., Brooklyn 16, if you have an interesting item.

there is "life, activities and achievements" for you! And the accent goes on "achievements"! One good turn deserves another so, Mr. Stryker, if you get thrown into jail do let me know the details!



CHURCH DOORWAY Henry J. Sihler

The afternoon I spent visiting Henry J. Sihler in his Mt. Vernon, N.Y., home proved to be a stimulating and interesting one. Mr. Sihler is a young man in spirit, though he happens to be Willoughby's second oldest customer. (Someday I would like to know the name of the oldest customer! Are you listening, Joe Dombroff?) He is also one of the original group which founded the Miniature Camera Club of New York and in that deal was associated with such people as Fenwick G. Small, the late J. Ghislain Lootens, Arthur S. Mawhinney and other luminaries of photography.

Sihler's first camera, purchased in 1898, was known as a Vibe. It took pictures on 3 1/2 x 3 1/4 inch plates and these were swung into position with a key similar to a clock key. His second camera was a Kodak, a roll-film camera fitted with an achromatic lens. The shutter was set for but one speed. Mr. Sihler still owns this antique. From this he graduated to something manufactured in Rochester known as the Bo-Peep which produced 4x5 inch negatives. Afterward came many cameras. A Pony Premo B; a Cycle Graphic; followed by every Graflex from the 2 1/4 x 3 3/8 to the 5x7 Press, including the Home Portrait. He has now settled down—if "settled down" describes it—to a Leica, a Super Ikonta B, several Deardorffs and enough lenses that, to name them all here, would turn this item into a catalog listing.

Henry J. Sihler learned photography the hard way. Let me quote from a letter I received from him before I made my visit.

I went to a hard school of photography when I worked for N. W. Fenfield who operated under the name of Pictorial News Company, 1907-1909, and when I hear some of the news photographers gripe of the hard life they have, it just makes me laugh. In those days newspapers didn't have a staff and Pictorial News covered for several of them, the New York Herald, the New York Herald and others. We had to use a 5x7 Press Graflex which itself weighed about 14 pounds. No films but only 5x7

glass plates! I can well remember going to some top horse show where I had to lug that behemoth and 72 double plate holders. This for three days running! Back to the studio, develop the plates and make four prints from each negative, and receiving for this overtime, 50 cents for supper. The weekly salary was \$15 and we were expected to show up in the office every other Sunday. In the winter when things were slow, we received a three months' layoff.

Later I went into business and for a good number of years I did a great deal of work at N.Y.U., making thousands of lantern slides. I own a collection of pictures that I made on the Heights which would be unobtainable now.

I have often found that a man with so much equipment is apt to be short on pictures. Not so with Mr. Sihler. I spent much time looking at as fine a collection as one would wish to see; every print from the darkroom of Mr. Sihler. And, by the way, that darkroom! It would be envied by many a professional. Complete in every detail, roomy and clean, with no acid smells!

Recently Mr. Sihler has taken up Kodachrome and the next time I call I am to have a private showing of his slides. This I look forward to.

It is comforting to be reminded on occasion that everyone who has passed on to the Great Beyond is not always completely forgotten. I was pleased when I received a release from the George Eastman House giving news of an exhibition of photographs made by the late Clarence H. White, for White in his day did much to further photography and to advance the craft to something closer to an art. The exhibit held at the Eastman House was composed of some 65 prints, made by White from 1896 to 1924. This was a loan exhibit, the prints being the property of Clarence H. White, Jr.

Beyond a doubt Clarence H. White was a great man and his work encouraged and enthused many notable photographers including such people as Ira W. Martin, George W. Harting, Antoinette B. Hervey, Cornelia F. White, John Paul Edwards, Henry Hoyt Moore and others who, some 25 or more years ago, were active with him in the Pictorial Photographers of America. Some of these followers have already gone the way of all flesh. Others are still active. In many cases, to name Antoinette B. Hervey for example, their work lives after them. Mrs. Hervey's work is to be found in the archives of the New York Historical Society.

Clarence White's Style

White was an organizer and a leader. He was active in the Photo-Secession, a group of American photographers dedicated to the advancement of photography as an art. Here he was in close association with Alfred Stieglitz. He was one of the organizers and the first president of the Pictorial Photographers of America and an organizer and director of the old Art Center in New York City. Back in 1910 he founded the Clarence H. White School of Photography.

White's photographic style leaned toward the soft focus; deep shadows being relieved with brilliant highlights. His photographs are luminous. It can be emphasized that White used a true soft focus lens in his camera and not a soft focus attachment, either on camera or enlarger.



DOWN IN THE VALLEY

Mildred E. Hatry, F.R.P.S., A.P.S.A.

Mr. White was a native of Ohio and began experiments in photography in 1894, exhibiting some of his prints two years later. During his lifetime he photographed many prominent people including Maudie Adams, Eugene Debs, Mary Garden and Irving Bacheller.

MMA Exhibit

The words printed here are naturally rattled off on my typewriter some few weeks before the presses roll in Minneapolis and for that reason I give herewith a belated mention of a very fine exhibit. I refer to the exhibit of newly purchased work of 51 American photographers which was to be seen at the Museum of Modern Art (New York City) during last August and September. I spent a very enjoyable hour in Gallery One inspecting the prints and I left feeling that whoever is responsible for this purchase is a very wise person and one appreciative of all that is good in photography. That phrase could be termed a verbal medal and I suppose it lands squarely upon the chest of Edward Steichen, director of the Department of Photography at the Museum. From my viewpoint that is a very good place for it to land.

I counted about 134 prints in the collection and among these I could find none deserving anything less than praise. Some gave me more delight than others and of these a picture of a box camera on a wooden bench by Tosh Matsumoto receives my first mention. The picture of a hamburger joint by Robert Frank is the sort of thing I like to do myself and likewise a down shot of an ordinary street scene by David Vestal, though here I would have preferred everything needle sharp.

One picture in the collection will remain in my memory for many a year. When I first looked at it I did not like it at all and was

able to find all sorts of things wrong with it. Spending more time examining it, the thing began to grow upon me. Now I keep thinking of it and thinking of it. I can truthfully say that it is a terrific picture. It was a photograph of four pallbearers carrying a closed coffin on their shoulders. The faces of the four men were unrecognizable; in fact they had no features at all but merely suggested features. The result was fantastic, eerie and dramatic. The maker's name is Joseph Bellanca.

Edward Wallowitch was the youngest exhibitor, being 18. If he holds to the standard of photography he presented at this exhibit, his name will be known far and wide within a few years.

Others whose pictures caused me to make a note of their names are Lou Bernstein, whose work has been mentioned in this department before, Morris Engel, Florence Hamolka, Lisa Larsen, Arthur Nakamichi, Homer Page, Irving Penn and Estelle Smilowitz.

Dee Knapp Gets Credit

As the accent of the exhibition was on youth, Edward Steichen delegated the job of installation to his young assistant, Dee Knapp. It would seem that Miss Knapp knows a thing or two regarding the proper presentation of a show. There was no crowding of prints on the wall. Each picture was hung where its best points and special virtues could easily be appreciated by the viewer. Photographers' names were lettered on neat white cards and these were tacked upon the walls. A well done job, Miss Knapp.

This might be the proper spot to mention the fact that there is a small admission charge at the Museum of Modern Art. One is so apt to think of a museum as something for free that I think it only fair to



MONTAUK

W. W. Ireland



BUZZY

Robert E. Harris

OPEN HOUSE

W. W. Ireland



THE SCULPTURE GALLERY

Frank J. Soracy

state that here the visitor should have a little change in his pocket or her pocketbook. I hope that no reader will misunderstand this paragraph. I have no quarrel with any museum whose management decides to sell tickets. I rather feel that the idea is pretty swell. After all if the photos, paintings or objects beyond the door are worth spending

time to look at there should be no objection to a small fee at the gate. It is really the visitor's contribution to the advancement of art. I have never heard of a visitor complaining of the admission charge at the Museum of Modern Art, nor have I ever seen one walk from the lobby in high dignity, declining to buy a ticket.

ing pieces down to a bare statement of fact, without adjectives or build-up, he has managed to keep the name of that group in print perhaps more often than any other group in New York City.

The North Shore Camera Club of Massachusetts recently announced a new type of membership to be called "Family Membership" which will give full privileges to two persons in one family at a special rate.

News from the Camera Clubs

The Boston Camera Club has its fall instruction program well in hand, with publicity mailed and booklets ready for those interested. This is one way of assuring the success of photographic courses. Too many clubs are prone to let things go to the last minute and thus an uninformed public is the result. This fall Cecil B. Atwater, F.R.P.S., F.P.S.A., will conduct a course on "Movie Making for the Amateur," and Mr. Atwater's background in photography and photographic writing and teaching is a certain guarantee that the student will receive sound instruction. Again this year Richard C. Cartwright continues his very excellent course for beginners. This marks the tenth season for his course and it receives praise from all who have passed the previous ones. A descriptive circular and an enrollment blank may be obtained by writing to Edward P. Harding, 13A St. Mary's Court, Brookline, Mass.

Good Mailing Piece

The Lens Art Camera Club of New York City had a very novel mailing piece to announce its midsummer field trip. This must have been something of an expensive printing job, but if a club can afford it, it does make for a good impression. On one page there is a photograph of one of the pretty girl models in a captivating pose while on another page one sees a photo of some of the members, cameras open, picturing another model posing on the beach. Pertinent information on the shindig is printed in another spot. This circular was enclosed in an envelope containing another circular printed by the resort where the outing was held. A dandy idea. It is possible that there may be some extra copies at their clubrooms, and if your club would like to know what it is all about, perhaps one would be mailed to you. No harm to ask. The address is Y.M.C.A. Building, 180 W. 135th St., New York 30, N.Y.

Darkroom Column

The Cleveland Photographic Society in its publication, *Through the Darkroom Door*, August 1950 issue, tells that Norris Harkness writes his well-known column, "Let's Make Pictures," for the Cleveland Plain Dealer. It will be remembered that he wrote this for the New York Sun until that paper was sold. I understand that this column is now being syndicated and so is available to camera fans in many sections of the United States.

This writer spent a very interesting evening recently, judging prints in the monthly print contest held by the Village Camera Club of New York City. It was the first

time I ever evaluated prints with the ratings requested by this club. After doing it, I am in favor of the system. Instead of first, second and third places, plus a certain number of honorable mentions, I was asked to select four prints in class A and four in class B and each of these was rated equal as "exceptional prints." At one point I had difficulty in making a choice between two prints and the print chairman told me not to choose but to rate each "exceptional" providing I felt that way. This I did. Those whose work I chose on this night were Kurt Elkan, Jules Gruenwald, W. W. Ireland, Nat Kaufman, W. E. Ogilvie, Kay Stinson, Wilma Toth and Sam Weinstein.

New Jersey Show

The museums in New Jersey certainly do right by photography and camera clubs. Readers will remember that I reported on a splendid show hung in the Newark Museum just a few months back. Now comes to my attention a catalog from the Second New Jersey Photographic Exhibition in which 16 New Jersey camera clubs hung 75 prints made by their members. The show was held in the New Jersey State Museum in Trenton. I have been in that building. A fine place for a photographic exhibit.

From the very neat catalog I note that the following clubs were represented: Bloomfield, Englewood, Hillcrest, Maywood, Orange, Perth Amboy, Princeton, Roche, Sussex County, Toms River, Trenton, Union County, West Essex, Westfield, Women's, and the Photographic Society of Central New Jersey. I also note the names of a number of excellent workers, some of whom I have seen in catalogs off and on for a good number of years, for example, Grace Ballentine, George Ames, William Deppermann, Thomas R. Fay, Max R. Rubin, Eustace C. Soares and Arthur M. Tunick.

Club Publicity

In a press release sent out by the Oakland Camera Club of Oakland, Calif., we learn that John O. Siipola has been elected president of that organization. This club mails a really professional press release and the publicity chairman, Bertha P. Brady, deserves a pat on the back in the matter. I imagine that this lady gets results in the way of press notices for her club, as editors will read the type of material she is sending them. Too many clubs bury the important facts in a mass of words and sentences that are so overpowering they are left unread.

F. H. Spoor has done publicity for the Pictorial Photographers of America for a good number of years. By keeping his mail-

Donated Prizes

The Germantown Photographic Society (Philadelphia) in its publication, the *Crier*, expresses thanks to various firms who donated door prizes and favors at its 11th Annual Banquet. Taking one full page of three columns, it lists by name 100 business outfits participating and notes that there were a number of other firms who wished their names withheld! From American Photographic Publishing Company to Zwigatote Cafe goes the list! We think it simply marvelous that any one club can inveigle everything from a book to a glass of schnapps from such a large number of outfits and certainly someone here possesses very persuasive powers. On other pages in this same newsy sheet we note that Gerald Tattersfield (we knew him personally in those good old days of the New York World's Fair!) is active in the club and has lectured on his recent trip to India, illustrating with Kodachromes.

The clever little pen and ink sketches that decorate the pages of *Contrast*, publication of the Woodland (Calif.) Camera Forum do make the sheet a lively one. Credit for editing is given to Don Plank and Ralph Perkins but it is not stated which of the two earns the nod of approval for the art.

From *Photo Northwest*, the bulletin serving the Washington Council of Camera Clubs—the State of Washington, that is—one discovers that 24 clubs make up this Council. On the editorial page one reads of quite definite plans for the establishing of a headquarters, with meeting rooms, in or near Seattle. It will be a hard pull and they seem to know it.

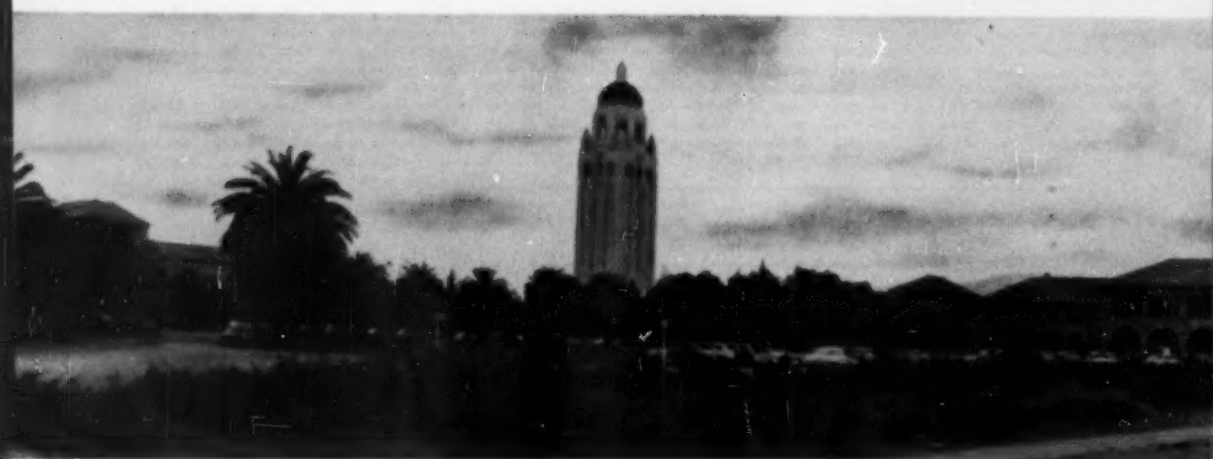


PEEL PAINT TO BARE WOOD WITH ONE EASY STROKE

NEW ELECTRICAL TOOL removes any number of coats of paint from any wood surface. The new "Lectro Paint Peeler" instantly softens paint electrically and peels it off the surface clean to the bare wood with one easy stroke. No danger of fire—will not scorch or burn delicate wood surfaces if used according to instructions. No mess—no small—even fun to use! Removes paint, enamel quickly and easily. Sturdily constructed to last for years. Sent complete with extra long, quality electrical cord and automatic safety stand attached for use in rest position. Simply plug into an A.C. or D.C. outlet—let heat for several minutes and remove paint to the bare wood on exterior or interior painted surfaces, boats, windowills, screens, doors—a hundred other uses. Nothing else to buy. Complete tool approved by Underwriters' Laboratories. Full money back guarantee.

If your dealer cannot supply you, enclose \$4.95 in check, cash or money order and send directly to:

LECTRO WELD, INC. Dept. AC-11
2189 W. 26th Street Cleveland 13, Ohio



HOW TO

MAKE PANORAMIC PHOTOGRAPHS

Ordinary Equipment Can Do The Job—Here Is the Way

by Roland Wolfe

THE TRAVELER'S LAMENT always has the same lyrics, "This picture can't begin to give you an idea of the magnificent scenery; trouble is, my camera could get only a small portion of it." Nevertheless, your camera can get more—much more—of that view to give the folks at home a better conception of those high spots in your travels. You needn't mourn the passing of the panoramic camera, because with a few adjustments and a little extra work thrown in, your own camera becomes a panoramic camera.

The advantage of the commercially manufactured variety was its ability to get the picture on a single strip of film. You can procure the same results, but it will necessarily have to be done in sections and the paper prints from the negatives spliced together. It's a comparatively easy process in spite of the extra work involved and the finished pictures are bound to give you pleasure and satisfaction—to say nothing of the fact that you'll have added another photographic technique to your repertoire.

There are a few factors to consider when shooting a series of pictures for a spliced-up panoramic photograph. The first and most important relates to the position of the camera lens. The camera itself absolutely must be on a tripod and should also be level. This can be established either by checking the scene on the ground glass or by using a small spirit level which is obtainable at most camera supply shops. A hand held camera would produce all kinds of distortion, making it impossible to get a set of matching negatives.

Ordinarily, when the camera is on a tripod, the axis

of the lens and the point at which the camera may be pivoted are not perpendicular, the lens usually being some distance forward of the pivoting point. When the axis of rotation and the axis of the lens are in alignment, the images of distant objects shift their relative positions very little with each exposure but if the axis of rotation is at the back of the camera, the images will shift considerably and it will be impossible to match the subsequent prints. One trial will convince you that this is so.

A lens has two nodal points which are defined as "either of two points so located on the axis of a lens that any incident ray directed through one will produce a parallel emergent ray directed through the other." The rear nodal point of the lens and the axis of rotation should be perpendicular, in which case the images being recorded will change their relative positions very little each time an exposure is made.

Finding the exact position of the rear nodal point of your camera lens would be an optical project, but there's no need for such mathematical precision. The rear nodal point will be just slightly in back of the lens diaphragm. If you line up the rear part of your lens directly over the rotating point of the tripod head, the approximation will be close enough.

Small, lightweight cameras of the 35mm or twin-lens reflex type are easily positioned for panoramic work by means of an accessory plate which can be turned out in the home workshop. If you lack such facilities, a machine or sheet metal shop will turn one out to your specifications for a nominal sum. Notice, in the illustration, that the lens axis and the axis of rotation are separated by about $1\frac{1}{2}$ inches. The camera is moved back this distance by means of a small plate cut from a sheet of 3/32 inch aluminum.

It's easy to equip your tripod head with a set of radial markings by making a pattern from a narrow strip of paper, fitting it around the tripod head like a collar and cutting off the overlap so that the length of the paper strip is equal to the circumference of the head. This provides a pattern upon which you may mark the degrees.



Area covered by normal lens

Area covered by wide-angle lens

With the head marked off in degrees, you can use any camera for panoramic sequences merely by turning the head for a specified number of degrees, once you know the angle of view of the lens. Since the image of each negative must overlap slightly onto the adjacent one, the amount of rotation between shots is a few degrees less than the angle of view of the lens.

Determining the angle of view of your lens is accomplished in a few minutes. First, draw a line as long as the focal length of your lens on a sheet of paper. At right angles to this, draw another line which is as long as the longer side of the film used. You now have a figure in the form of a T. From the base of the T, draw diagonal lines to each end of the head. Lay a protractor with its base at the bottom of the T. The angle of acceptance of the lens is indicated on the protractor scale.

Another factor to remember when shooting panoramas is to avoid bright, sunny days. Better results are assured if you select a day which is bright, but overcast. In a single exposure we have an established negative density which is determined by the length of that exposure. With a series of exposures the negative density changes as the camera is swung away from the sun.

Trouble is apt to be encountered when you try to match prints made from negatives with various densities. An over-all evenness of illumination which is found on bright,

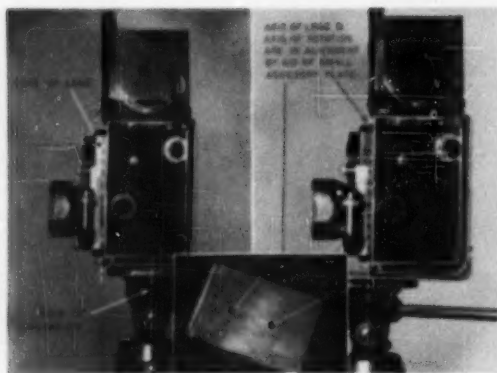
but overcast days is preferable to the brilliant, but variable illumination provided by direct sunlight. When there's nothing for it but to make your pictures in bright, sunny weather, it's advisable to limit the expanse of the panorama. In this way, there will be fewer negative densities with which to contend and print matching will be easier.

This brings up another point, how many exposures should one make for a panoramic view? The answer will depend primarily upon how much of the area you wish to show and also upon the angle of your lens. Let's assume we've found a magnificent vista from some mountain top and have an unobstructed view of the entire horizon. There's nothing to prevent our taking a series of photographs of the whole horizon line, all 360 degrees of it. This would mean a first exposure from a stated position, shifting the camera for successive exposures until it was back to the starting point. This complete 360 degree panorama is a pointless novelty, since we are not endowed with circumferential vision. Putting it another way, "We ain't got eyes in the back of our heads."

The normal angle of view of the human eye is in the neighborhood of 30 degrees. When the eyes are rolled, allowing us to scan a scene, that field of view is increased to about 50 degrees. We can further increase the angle by shifting the head. To be precise, the original angle hasn't been altered, but the field of view has been ex-



Prints to be matched (made as described in the article) are laid on a sheet of illuminated glass and matched accurately before splice.



The camera on the tripod is not centered over the axis of the lens and must be offset on an easily-constructed base-plate to avoid distortion in panoramic views. The illustration shows new mount.

tended because of the eye and head movements. Therefore, if we stand in a certain position, we can, by moving eyes and head, visually embrace about half of the 360 degree circle surrounding us.

Of that 180 degrees, we may wish to include all or any part in our finished picture. Except for special purposes, the full scope of 180 degrees isn't too pleasing or truthful, since we'd be converting a semicircular subject to a straight line in the finished picture. The best panoramic view will therefore not extend too far beyond 120 degrees. Our finished print will then give us an acceptable presentation of the original scene as we'd looked at it with normal shifting of eyes and head.

After the negatives have been exposed, they should be processed simultaneously to insure uniformity. If the prints are to be enlarged, the enlarger must be kept at the same setting for all of them and the exposed prints developed for the same length of time. Every effort should be made to keep all steps of processing as uniform as possible. Yet, in the printing stage you may have to resort to the first bit of juggling. A sample set of prints may reveal tonal differences where they are to be joined, allowing no recourse but to dodge or burn in where necessary to get a closer tonal match.

Theoretically, a set of prints made from negatives of identical densities (the prints exposed and developed exactly alike) should have matching tones. But I've yet to see this work out in actual practice, since there are so many variables encountered along the route. For this reason it's wise to make two or even three sets of prints so that substitutions may be made in the final splicing process. There's always a chance, too, that one of the prints in the set may be accidentally spoiled or damaged so you'd have to start all over again anyway.

To further increase the chances of getting close tonal matches, you might try this system. Determine the exposure and then expose all the prints, but develop only the first one, watching the time of development very carefully. (Keep a thermometer in the developing tray and watch the temperature; changes in solution temperature can radically affect the color of the prints.) Fix this first print out and rinse it off. Then place it on a sheet of glass,

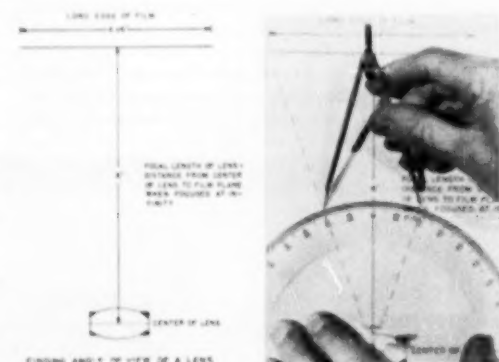
a ferrotype plate or the back of a tray and set it as close as possible to the developing tray. Use this print as a guide for the remaining prints. Developing time should be quite close, but may vary slightly one way or another and the guide print will enable you to get closer tonal matches than exact timing alone would.

When the prints are dried and flattened, the job of matching and splicing them is next. The best way to do this is to work over a strongly illuminated light box or retouching desk. Tape the first print to the glass with masking tape and lay the second one over it, moving it about until a satisfactory match is secured. See that the most important parts of the picture are properly aligned; incidental parts can be touched up later with spotting color if necessary. Tape the second print in position and proceed with the balance of the prints in the same fashion.

The layout of a series of four prints is not exactly a straight line arrangement. This is caused by slight shifting of the images when the camera was rotated. You'll discover that objects nearest the camera will be harder to match up, although distant objects will merge quite well. Since much of the foreground will be trimmed away, this isn't too serious a problem. After all the prints are lined up, mark off the top, bottom and sides which are to be trimmed away, using a straight edge, ruling pen and ink.

You'll need a good, sharp stencil knife or a single edge razor blade to cut through parts of each overlapped section. Test the blade on a scrap print to see that the cut is clean and smooth. Select places between the overlays which will be least noticeable when the parts are joined. After the joins are cut through, trim off the waste areas. Individual parts are now laid out on a sheet of cardboard and rubber cemented.

You may be able to get a smoother join and further eliminate traces of join lines by sanding down the back edges of the prints where they're to be matched. This is advisable when the pasted-up print is the final one, but if it's going to be copied for a new printing negative such effort is needless. The copy negative can be retouched to entirely eliminate all traces of the joins and the final prints can be spotted where necessary.



The taking (acceptance) angle of any lens may be found by drawing its focal length at right-angles to the long side of the film as above, and the angle measured by protractor as indicated at right.

**NEWEST REVISION
OF THE MOST READ
AND USEFUL COLOR
GUIDE EVER WRITTEN**

Just Out!

Natural Color Processes

by Carlton E. Dunn

»» **FIFTH EDITION** ««

THE MOST REWARDING BOOK any color enthusiast will ever find is this outstanding work by Carlton E. Dunn. No other book on color photography gives the working photographer such complete detail on the things he needs to know to successfully produce color prints through any presently available process.

You will never be more enthusiastic about color than when pursuing the subject with Dunn. Himself an outstanding color worker, Dunn is also a friend and confidant to nearly every professional and serious amateur color photographer from coast to coast. His full-time position as traveling demonstrator for one of the country's largest photographic wholesale houses keeps him in constant touch with all these workers and affords him the priceless opportunity to add their experience to his own.

The result is not only the most comprehensive coverage of the technical aspects of color—but also a revelation of every practical dodge and working method in use today. Far more than a pedantic "how to" guide that points the way to perfect color prints under ideal conditions, Dunn's workmanlike approach includes hints and techniques that can be used to partially cor-

rect for errors of exposure or settings that might creep in even with the most careful worker. Throughout the many years this book has been available, this fund of invaluable minutiae has been constantly added to by readers who hoped to pass their hard-won knowledge to others.

The book was originally conceived and written in 1936. Now its great value has forced it into a *fifth edition*, an up-to-date 1950 revision that gives explicit directions for every color process now available. Even those who already own any of the first four editions will want to add this newest revision. Color, more than any other phase of photography, has advanced far and rapidly during the last five years . . . and **NATURAL COLOR PROCESSES** has been kept abreast of every advance.

To be successful in practicing any of these processes, you must recognize the need for painstaking trial and error. The problem is entirely one of technique . . . perfection comes only through learning faithfully the things to do as well as the things not to do. It was the purpose of Mr. Dunn to make this process as easy on the average worker as it possibly could be. When you read his text, you will agree he has succeeded.

\$500

Chapter I—*Simple Color Analysis* gives you the necessary theory for making color prints. Chapter II—*Making Color-Separation Negatives* follows with the logical proposition that a good print depends on a good negative. In the chapters that follow, III through XII, you delve fully into the many color processes that are available to you today: autotype trichrome carbons; the autotype wet carbon system of three color printing; the Kodak dye transfer process; dye mordanting; the Eastman Color processes of Kodachrome, Ektachrome and Ektacolor; the Ansco color process of color reversible film; the

colortograph tricolor pigment process; Gasparecolor; Dufaycolor; and finally, the Kodak Flexichrome process. Throughout its 286 pages is a liberal use of charts and formulas that can be re-copied on cards to be hung near where you are working. From the step-by-step procedures set forth, the reader can easily devise his own work-table to match the equipment and dark-room set-up at his disposal. The results from your new adventure in color under the capable guidance of Mr. Dunn will repay every minute you spend with the book. Not a line is extraneous.

Order Through Your Local Camera or Book Shop or Direct From

Book Department: *American*
PHOTOGRAPHY

421 Fifth Avenue South
Minneapolis 15, Minnesota

Considering Pictures

with L. Whitney and
Barbara Standish

THE IMPORTANCE OF CHOOSING the best camera position and the most opportune moment for taking a picture cannot be overemphasized. Each year amateur photographers make thousands of pictures of interesting subjects and yet many of them fail because the photographers were not perceptive enough to select the best possible camera positions and make their exposures at the most effective moment.

On our annual trip to Vermont in July, the matter of choosing the right camera position was usually solved the hard way, by climbing what seemed to be hundreds of barbed-wire fences, jumping ditches and trudging up and down innumerable hills. The finished prints have not yet been made but we are hopeful that they will reward our efforts.

While in Vermont, we took time out from picture taking to make our usual visit with John and Althea Doscher at the Country School of Photography in South Woodstock. The talk inevitably turned to photography. We mentioned the beautiful cloud formations that we had encountered and also commented that because of changing skies, picture taking required either the speed of a gazelle or the patience of Job. John agreed and told us of some of his own methods of guiding students in selecting the best camera position and grasping the most advantageous moment. The discussion brought forth several groups of pictures, and one series in particular illustrated these matters so well that we ended up by carrying the pictures away with us for reproduction in this column. All the pictures were, of course, made by John Doscher.

In Figure One we have what John calls a typical postcard pictorial. Obviously the picture was taken from too far away, and the little white church in the distance is lost in a vast conglomeration of trees, hills, and other buildings. Undoubtedly, by proper framing and control work, a moderately interesting print could be made from this first exposure, but it certainly does not do justice to the subject. Many less-experienced photographers would, however, consider this camera position ideal and would not try to improve upon it.

In Figure Two we have a closer view which is a tremendous improvement over Figure One. All of the elements of the composition have been greatly simplified and the church is now in a position of dominance. Before making this exposure, John spied two little boys coming around the bend in the road and was able to get his camera into action fast enough to take advantage of the two figures

which add greatly to the appeal of the subject. However, the figures are a bit small and insignificant.

In Figure Three John is somewhat closer to the church and the two figures have advanced a bit farther towards the photographer. Now we have an excellently arranged composition which is greatly helped by the position of the boys. Their pose is spontaneous and perfectly natural. In Figure Four the boys have advanced still farther into the composition and have become so aware of the photographer that they have lost the naturalness in their gestures and expressions. They are also so close to the camera that they tend to dominate instead of support the arrangement.

In making the finished print, John selected the test print shown in Figure Three as the best of the group. By controlled printing, by removing telephone wires and by extending the clouds horizontally to break the merger of clouds and steeple, we have a delightful and very satisfying photograph. Also note that some tonal alterations have been made in this finished print which greatly helps to dramatize the design.

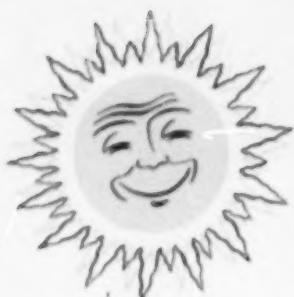
As Mr. Doscher has demonstrated with this series, taking advantage of just the best moment of time requires experience and skill in design.

Whenever we drive around the countryside looking for pictures, we keep two hand cameras ready for instant action on the seat of the car beside us. Both cameras are set for an average exposure of 1/100 of a second of f/6.3 (with Plus X or Supreme film and a yellow filter) and are prefocused for an average distance of about 35 feet. The short focal length lenses give us a very considerable depth of field. With the cameras thus ready and using average conditions, we can sight a subject, stop the car quickly, jump out and start shooting without having to consider exposure or focus. The above-mentioned settings will be perfectly satisfactory for nearly every subject. If time permits, the exposure and focus are, of course, carefully checked, but it very frequently happens that by being ready for instant action, we are able to get pictures that would otherwise be lost.

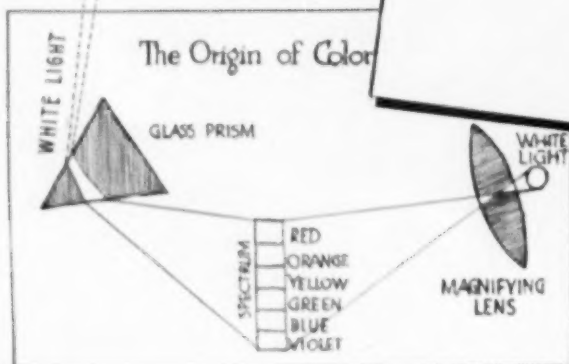
Sometimes it is a good plan, when the subject is first sighted, to quickly take an exposure from the first viewpoint even if the lighting and other conditions are not ideal. After this first exposure is made, then the photographer can explore the subject more thoroughly and make as long and careful a study of it as seems warranted. Often, this first quick exposure turns out best of all.



These prints represent the evolution of one of John Dasher's salon prints. As the Standishes explain, these were taken in succession, with the final print on the right being made with control work on the tonal values from the negative of the third print above. All prints by John Dasher, F.R.P.S., F.P.S.A.



color and human vision



Color originates in the sun and comes from there in the form of electromagnetic impulses which the eye interprets as white light. When a beam of sunlight is directed through a prism, it is split into its component colors: red, orange, yellow, green, blue, violet. A double-convex lens will re-combine these rays back into a bundle which the eye sees as white.

Nicholas Haz, F.P.S.A., F.R.P.S. Skokie, Illinois

Mr. George E. Wright,
Editor, American Photography,
Minneapolis, Minn.

Dear George:

Now that you know the physical ways of reproducing color slides and transparencies it is time for you to learn the inner secrets of human color vision.

To learn it will prove most expedient. The first thing to do will be to color by hand the illustrations I am putting into this letter. Take some crayons, water colors or dyes, and put the colors into the blank spaces that are designed for them. Then follow up with the experiments I am recommending to you. You can work alone or with an audience. An audience helps because there is nothing like comparison by many eyes to find the truth about color.

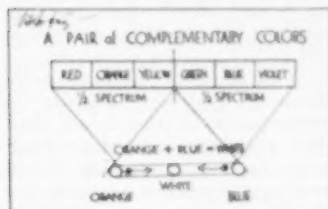
You already know that color comes from the sun in the form of white light. When we break up a beam of white light into its elements by passing the beam through a triangular glass prism we find that the white light is made of six colored lights that we have named red, orange, yellow, green, blue and violet. They are lined up in a band that we call the visible spectrum.

ILLUSTRATION NO. 1

The second in a series by Nicholas Haz on methods of hand-retouching, combining and re-arranging color slides. This article offers the foundation for advanced lessons to come.

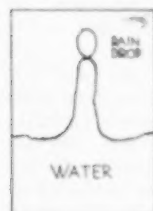
The white light is dissolved into six colored lights, which, when collected by a magnifying lens, add up again to white light.

If we cut the spectrum in two parts (in any proportion) and mix the parts into solid colors we get a pair of complementaries, colors that complete each other to the whole of the spectrum or to white. It is important for you to remember that complementaries complete each other to white:



The spectrum is cut in two parts, each part is mixed into solid color, the two, orange and blue in this picture, complete each other to white.

The best known pairs of complementaries are red and green, orange and blue, yellow and violet.



Complementary colors are to each other what positive is to negative, dark to light, male to female. If you wish to become expert at color work, you must know them by heart as a writer knows his alphabet.

The complementaries are inseparable for an exceedingly important reason, namely, that our eyes generate complementaries without a letup in response to all colors that fall upon our retinas.

It is impossible for any human being to see things without complementaries because, whether he knows it or not, he sees them everywhere. His eyes will not work any other way.

To make this point clearer let me remind you of another odd natural fact. You may have seen super-speed photographs showing the behavior of the still surface of water when hit by a rain drop. The drop bounces right back, pushed by a column of water that pops out of the still surface. The human retina acts similarly when a drop of color hits it. A spot of red is bounced back by a spot of green; a

blue gets an orange response, a yellow a violet one. But the eye does not limit itself to bouncing back little spots of colors now and then; no, the eyes react with complementary colors to every color of every image that falls into them.

But there is no obvious, flashy battle of complementary colors outside of the images on the retina. The complementary colors made by the eyes fall in smoothly with the real, existent colors and seem to be a part of them. We, the onlookers, think that the imaginary complementaries actually exist in the objects whose images we see, but they are illusory all the same; they exist only in our minds.

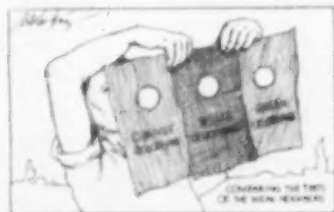
Since the best color films cannot imagine color, they cannot record imaginary color. So if we want to make our color photographs really truthful and convincing, we must replace, usually by hand, the colors that the color films have left out.

You might ask me, George, "Why don't the eyes imagine the complementary colors *into* the pictures as they do into nature?" A good question, too, that has been answered by many theories. The best answer is that our eyes are like us; we can eat the apples and grapes we photograph but cannot eat their images.

I suppose, George, you would like to have tangible proof of the fact that eyes manufacture complementary colors. The proof is easy if you will take the trouble to experiment.

EXPERIMENT ONE

Take sheets of cellophane in the six colors and cut a hole the size of a silver dollar in each of them. Look at the sky through these holes, first one by one, then holding up two or



even three cellophanes at the same time. Compare the tint of the sky through these holes, and I bet that you will find great differences between them.

You will see that through some holes the sky will appear yellowish or orange tinted, through others it will seem bluish, purplish or greenish. In addition the sky, seen by the same eye at the same time, will seem to be lighter through one hole and darker through another, but it will look extra blue through the orange cellophane, orangish through the blue cellophane and so forth, always in the complementary color of the cellophane through whose opening you are looking.

Through a dark-toned cellophane the sky will seem to be light; through a light-toned one it will seem darker. You may have been surprised on a gray winter evening to see how blue the leaden sky seemed when viewed from a room lighted by orangish lamp bulbs. (All ordinary electric bulbs have orangish light.)

EXPERIMENT TWO

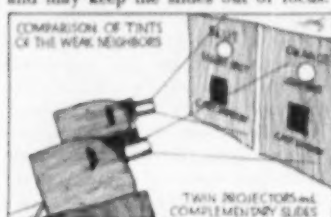
Make 2x2 lantern slides of the six colored cellophanes. To do this take a few thicknesses of cellophane to get good rich color and punch a pea-sized hole in them. Paste on to them, near the hole, a small spot of black tape before you bind the slides. You now have six lantern slides, with a hole and a black spot on every one.



Project slides first one by one and examine the tint of the bright spot that is the "picture" of the hole. You may or may not find a difference in the tints of these bright spots as they are shown successively. It may be that your eyes aren't sufficiently trained to detect little differences in color. If you see no difference, project two slides at one time out of twin projectors up on the two halves of your screen, or perhaps on two different screens. The chances are that you will then see the different tints that the bright spots will show. They will be of a complementary tint to the color of the cellophane.

Even if you have difficulty in seeing the color tint in the bright spots, you will see it in the shadows which are

cast by the black spots. They will be obviously and clearly complementary to the color of the slide. These experiments should be carried out in a light room. Even complete daylight will do providing the projector lamps are strong enough. You may take the screen quite close to the projectors and may keep the slides out of focus.



EXPERIMENT THREE You may also experiment with the slides in complete darkness if you take them from the slide carrier and hold them before the lens of the projector so that a little white light escapes around them. Some white light is necessary to see the imaginary complementaries, otherwise they will be hidden in complete darkness. Hold the slide with one hand and put your other hand in front of the slide in order to cast a shadow on the screen.



With this experiment, you will have no doubt about the presence of complementaries. They will be most unexpected, as when a bright blue or violet will pop up on a screen in response to only an orange slide and an orangish projector lamp. Not a spot of blue to be seen otherwise in the room.

Now, George, you may say, "But those are lamps and projectors, they are artificial stuff; how about ordinary things and people in ordinary light, will they work the same?" They will, George. Convince yourself by the following experiment.

EXPERIMENT FOUR Take six bright colored sheets of paper in the six colors. ("Art paper"

used by school children in their art lessons will do.) Add some sheets of black, white and grey and several sheets of white tissue paper. Cut one black sheet into two-inch squares and put one of these on each of the colored sheets; also on the black, white and grey ones, all of which you lay on the floor. Cover the colored ones with the tissue paper, black square and all. You may leave the black, white and grey ones uncovered. (No. 9)

You will find that the black squares covered with white tissue will not seem grey as they should, but will assume some color. The color will always be complementary to the color of the paper under the squares, and this, in spite of the fact that these colors will be quite weak, since they too will be covered with white tissue paper. The black spot will seem blacker on the white paper than on the grey one and will vanish on the black.

One more experiment will be enough to clinch the truth of this color law.

EXPERIMENT FIVE Cut one of the grey sheets to pieces and put one of these upon each colored, black, white and grey card. You won't need the white tissue this time. Now look at the grey spots on the bright colored backgrounds and you will notice that the greys won't seem to be pieces of the same paper they will be so different in color and tone. They will seem light on the black, dark on the white and invisible on the grey backgrounds.

Tone, which is the difference between darks and lights in pictures, also works on the retina. Black makes a white in your eyes and adds it to the neighbors, white makes a black and adds it to the neighbors. The retina does not react violently to greys so they produce weak counter-effects.

The tone and color reactions of the retina work jointly. A light yellow makes a dark violet; a dark red makes a light green. These are always added to the neighbors.

All these experiments together ought to prove to you, George, that

I. The human eye produces complementary colors in

reaction to every color that falls on the retina,

II. The eye-made complementaries are added to the neighbors of all colors,

III. The eye-made complementaries are easily visible in the weak neighbors of strong colors.

So far so good, but how about the eye-made complementaries and strong neighbors? What do strong neighbors do to each other? These are good questions and should be answered in full.

Strong neighbors produce their complementary reactions similarly to others and impose them on each other. This mutual exchange of the imaginary complementaries may benefit some combinations of neighbors and damage others.

This helping or hurting of the neighbors depends on whether the neighbors are complementaries or non-complementaries. If they are complementaries, the neighbors brighten, cheer each other, if they are non-complementaries they reduce or slow each other down. The cause of this is obvious. Study it by experiment.

EXPERIMENT SIX Take your colored sheets again plus the black, white and grey ones and lay them on the floor. Cut one bright colored sheet into triangles and lay one of these upon each sheet on the floor. Now step back and study the effect of the influence on the different backgrounds on the bright colored triangles. You will find that they are brightened, livened up when put upon the complementary backgrounds, but subdued when they are on the non-complementary ones. The color will seem darker on a white background, lighter on a black background, and normal on a grey background. (No. 11)

The cause is easier to see if you limit yourself to just three colors. Take yellow, violet and orange triangles and put each on a violet and on an orange background. The first combination being yellow and violet, will work as follows: the yellow makes a violet in the eye and adds it to the violet. Violet plus violet makes a brighter violet. The violet background makes a yellow in the eye and puts it in the yellow triangle. Yellow plus yellow makes a brighter yellow. The com-



bination is favorable and pleasant.

The non-complementary combination works as follows: the yellow makes a violet in the eye and adds it to the orange; orange plus violet makes a reduced orange. The orange makes a blue in the eye and adds it to the yellow. Yellow plus blue makes a greenish, discolored yellow. The combination is not suited to boost the neighbor. They discolor each other.

This is not necessarily a disadvantage at all times. When it is necessary to reduce a yellow or any other color (without mixing some black or white into it), give it a non-complementary neighbor; that will reduce it as needed. So another principle can be lined up with the previous three.

IV. Complementary neighbors boost each other; non-complementary neighbors weaken each other.

Obviously if you want a bright, lively, sparkling design you must put complementary colors in it. And you must put them near each other. To use a technical expression you juxtapose the complementaries. Juxtaposition means that objects are put so close to each other that their outlines touch. So juxtapose complementary colors for lively, snappy, bright, sparkling color effects.

Non-complementary colors when juxtaposed reduce each other's vigor; therefore, don't use them exclusively in your picture unless you wish for a subdued color effect. I repeat: colors can be subdued not only by mixing black or white into them, but by giving them non-complementary neighbors.

Should you wish to feature one part of your picture by bright color and subdue the rest, put a bright complementary "bouquet" into the featured part and surround this with non-complementary neighbors.

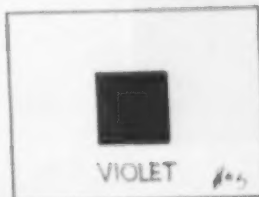
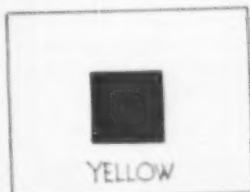
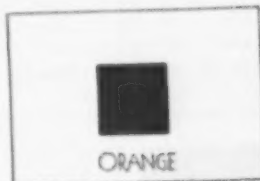
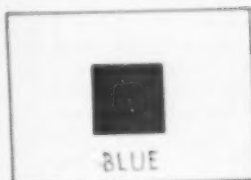
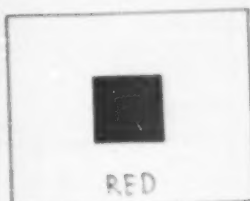
Color can be used not only in juxtaposition, but also, to use another technical word, in superimposition.

Superimposition in color work means that one color is put over another so that the under color does not mix into the upper color, but adheres to its own hue.

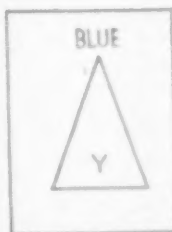
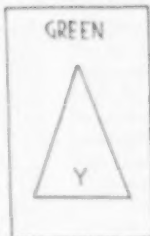
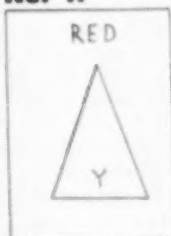
Putting one color over another, as putting a sheet of blue glass over yellow paper, is not the kind of superimposition I mean. A transparent color if laid over a solid color mixes its hue

No. 9

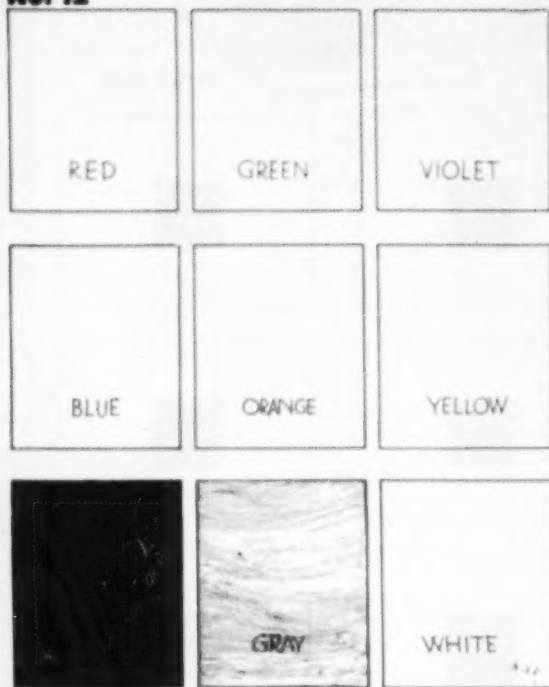
ANY
COLOR



No. 11



No. 12



to the under color. The technical word for this kind of superimposition is "glazing." Superimposition of color, in this letter, does not mean glazing but putting porous color over solid color. Superimposition of porous color is a mighty means of obtaining color effects that cannot be gotten any other way, so you should make an additional experiment, George.

EXPERIMENT SEVEN

Lay your colored, black, white and grey sheets on the floor again and this time superimpose one particular color over each of them. This superimposition will not be done by painting, projection or sketching, but by dusting. Take some dry chalk or pastel and a sharp knife. Now scrape some color dust from the chalk or pastel over part of every sheet on the floor. Dust neither too densely nor too sparsely. Do not cover the under color solidly. (No. 12)

The dusting done, step back from the sheets and study the effects of the color dust on them. Give yourself plenty of time because this study will

develop your color sense and give you perhaps much needed color education.

Instead of studying the effects with both eyes open, close one of them tightly and squint at the cards with the other. Go near and away from the layout and change the light over it. Compare and compare, but do not tire your eyes because they will go on strike.

You probably will find that the dusted-on color will sparkle over the complementary bases giving you a deep, distant effect like looking into space, while the dusted-on color over non-complementary bases will mix itself into the color and modify it towards warmer or colder. (Warm and cold will be explained in a following letter. A yellow, for instance, will warm a red, will make it orangish; will make a green yellowish; but will sparkle over a violet or a blue.)

This experiment should teach the important fact of color perspective, namely, that complementary colors superimposed over solid colors make the latter deep, distant, airy, ethereal. Remember this when you recolor your color slides and transparencies. There

is nothing like a little complementary color scattered or dusted or rubbed over solid, heavy images to make them assume airiness and roundedness. You can make solid blue skies appear deep by scattering a little orange color over them. Green meadows can be made to lie down flat (take on perspective), solid woodeny trees will seem to "fluff up" and become windblown if you sketch or scumble reds into them. Stiff brown walls (brown is an orange plus black, you know) will loosen up and assume perspective if you superimpose a little blue over them.

So let us add another principle to the four already listed:

V. Complementary colors superimposed on solid color will bring perspective and depth into the color. Non-complementary colors superimposed will merely modify the hue of the under-color.

If the experiments have now convinced you that the five principles I have listed are true, then it is time for you to go out in nature and study these effects.

You must learn to find the eye-made complementaries in the things and people you see around you.

Try first to pick out weak neighbors of strong colors and see whether the complementary colors of the strong will be visible in them. The simplest experiment will be to look at the tint of white clouds on a blue sky (or skies of any other color). White, grey and black are automatically weak neighbors, because they are not colors. You will find, for example, that a white cloud will have an orangish tint on a blue sky, greenish tint on a red sky, yellowish tint on a purple sky. A bluish-white cloud on a blue sky would be impossible to see, although many color photographs show them that way.

Next look at the shadows and cast-shadows of things in nature and notice that they are driven into the complementary colors of their surroundings. For instance, you will see that a cast-shadow on orangish sand will seem to be blue. It will seem to be green on white snow if the snow is tinted pink by the setting sun.

It will be much harder to find the reds your eyes put into greens or the greens your eyes put into reds. These

two agree on a purple in the shadows and other weak neighbors. Look for purples or violets (that are sometimes quite weak) in the shadows of trees, shrubbery, meadows and other green things. Experiment by painting red into green or green into red to discover that they add up to purples, or violets, unless both the red and green are warm (yellowish).

You will perhaps be surprised to find many blues in fleshtints. It will not do to paint blues all over the flesh tints, however. Blue will kill your fleshtints and dirty up the picture. But you will find the blues in the highlights, transfers and cast-shadows on the fleshtints. (Highlights and lights aren't one and the same thing, present usage of these words notwithstanding. Shop talk about photography and painting has a blind spot in this country when it comes to the word "highlight." There will be more on this subject later.)

Study deeply and long the complementaries that your eyes put into the

images of nature before you begin to experiment on repainting your color slides and transparencies.

When you feel that you can see (and remember) the complementaries in nature, you are ready to begin.

COLOR-CORRECTING EXPERIMENTS

Take one of your slides and put it into an enlarger that has a lamp which will not burn your transparencies and will not falsify colors. Greenish cold type lamps will not do, nor too strongly orangish bulbs. Since you are to keep your slides in the projector for prolonged periods, much care is needed.

Now you are ready to recolor.

First decide whether your design will improve by the introduction of one or more solid color spots. You may want a blue sky, green meadow, purple mountain, green house or red roof in addition to what you have. If you are projecting onto paper, pastel colors or dry chalk are recommended

at first. They aren't sticky and poisonous as some water and oil colors.

Now see whether the slide has the requisite amount of complementaries in the weak neighbors of the strong colors. If they are missing or weak paint them in, this time not in solid spots but by superimposition—that is, by scattering, scumbling or dusting on the color where it is needed.

Once you have painted all the colors you had in mind into the picture, test your effects by covering with white paper the painted projection and compare. If you and others think you have improved the picture, you have made good. If you don't like what you have done, start all over again on a fresh sheet and repeat until you have learned to do it well.

Sincerely yours

Nicholas HAZ
NICHOLAS HAZ

ASA Computer Eliminates Exposure Guesswork

If you are a camera fan who has often muttered, "Overexposure . . . Underexposure. I give up!" you can now dust off your lens and set forth with renewed assurance. There is no longer any need for guesswork in evaluating light conditions and camera adjustment. A new Photographic Exposure Computer issued by the American Standards Association, is available.

The computer consists of an inexpensive, pocket-size booklet incorporating a circular calculator for determining shutter speed and lens stop from index numbers as given on included tables.

Index numbers allow for all lighting variables, including the altitude of the sun by latitude, date and hour; atmospheric conditions (especially clouds); spatial structure of the scene (especially distance); conditions of illumination (shade and direction of lighting) and film speed. The guide thus evaluates light intensities and luminosity of scenes to be photographed. The calculator combines this index with a film exposure index to indicate proper camera adjustment.

Thus the computer meets the need for an inexpensive method of determining exposure more accurately than the usual rough and inexperienced visual estimates and proves better than an expert's estimate for unusual conditions. It is based not only on long-existing exposure tables but also on extensive modern data on radiant energy reaching the earth's surface.

The new computer is an American Standard, on which 45 national technical societies and leading manufacturers of optical and photographic equipment cooperated under the technical leadership of the Optical Society of America. It is a revision of an emergency standard developed in 1942 at the request of the Photographic Division, Bureau of Aeronautics, U.S.N.

The scope of the revised standard computer has been extended by including a scene index table for black-and-white and color transparencies or reversal materials for projection or viewing with an illuminator.

The computer contains 25 durable loose-leaf pages, $3\frac{1}{4} \times 4\frac{1}{4}$ inches, with a flexible fabricoid cover.

AMERICAN ANNUALS OF PHOTOGRAPHY 1948 1949 1950

Begin your photographic library with these three issues of America's oldest photographic annual. More than 300 pictorial illustrations with technical data and commentary. Current fact on film base, developers and development, color. More is the chance you've been waiting for. All three volumes for only \$2.00 . . . any two for \$1.50 . . . any one for \$1.00. Cash with orders shipped the same day. Order direct from:

Book Department

American Photography

421 Fifth Ave. So., Minneapolis 15, Minn.

More Fun!

Get more fun out of photography by joining the P.S.A., where you'll be intimately associated with others having the same interests.

Complete details for the asking; write to:

Photographic Society of America

2005 WALNUT ST.
PHILADELPHIA 2, PA.



RECTANGLES

An "outdoor pattern shot," one of Atwater's successful current prints. Jacob Deschin, reproducing it in the New York Times recently, commented that it utilized the full range of the gray scale.

MY FIRST RECOMMENDATION is that you make up your mind from the start that only your very best work will be sent to the salons. Competition is very keen and it should be realized that far more prints are rejected than are accepted. Sometimes prints fail because of small shortcomings. I have frequently heard judges regret that they could not vote for a print because the fault though easily avoided or corrected would be noticed readily when placed on the exhibition walls. On page 61 are some suggestions that if carefully followed may help to induce the judges to nod their heads up and down instead of wagging them sideways.

My experience of the past season of exhibiting when I sent prints to nearly all of the 92 salons may be of interest and help to those who intend to exhibit on a fairly extensive scale. To send to all of the salons appears to be a terrific task, especially if the time devoted to it has to be taken from a fairly busy life.

But the satisfactions are many. First is the experience gained from making a large number of prints. Perhaps the "smart" way to land high in the lists would be to accumulate negatives over a number of years, narrow them down to four super-dupers and send packets of prints from these four negatives to all the salons. Inasmuch as I am always interested in how others evaluate my work, the use of but four culled-down pictures would tell me little. I used prints last season made from 23 different negatives which were in a considerable variety of subject matter. Some prints quickly justified my confidence in them and made excellent records. Others were in-and-outers and one print I was quite fond of did so poorly that I stopped sending it out. Fortunately I had some older prints on hand that had never been sent to foreign salons and these saved me a certain amount of work.

EXHIBITION PRINTS

How to Improve Them

Final Article in a Series on Salons

by Cecil B. Atwater, F.R.P.S., F.P.S.A.

Good Sense for Salon Exhibitors

1. Be sure that your prints are well groomed. To send prints out that have been sloppily spotted or that contain ferricyanide or other stains, is to invite rejections.

2. Mounting should be appropriately done. Very few prints look their best on ivory or cream mounts even though the print itself is warm in tone. A white that is very slightly on the warm side is best. In general, avoid unusual methods of mounting.

3. Avoid large and unusual styles of lettering for titles and name. A pencil is preferred to a pen. Script is in good taste. Judges frequently ask for titles and if they are not appropriate to the subject the impression is unfavorable.

4. If you intend to send to a considerable number of salons, you will doubtless make up numerous copies of your most promising prints. Some of the copies may be better than others. Resolutely discard the inferior ones and save the judges the trouble of doing so.

5. Send your prints several weeks in advance of the closing dates of the salons. In my experience, packages of prints are often badly delayed in transportation. Foreign mailings should

be made if possible two months in advance, more for such distant continents as Asia, Africa and Australia. Mails to Great Britain are quite prompt but even for that area allow six weeks.

6. Pack prints so that they will be adequately protected from rough handling during transmittal. One-inch 16x20 fiber cases are the best. Very stout corrugated paper does a fair job but prints are much more apt to have their corners crushed when using such a container than they are in fiber cases. Foreign mailings are sent unmounted. The inclusion of a piece of light plywood in the corrugated paper package adds to the weight and to the expense but assures better condition on arrival.

7. Prints sometimes take a beating because of careless handling by salon committees. The prints are frequently stacked in huge piles. The mats are exposed to fingers that are not always clean and free from oily secretions. I use a stout mount of 14-ply Bristol board for support over which is placed a medium weight vellum cut out mount. Most of my prints are Simonized. This places a tough hide over the photographic emulsion. If the surface becomes somewhat blemished apply more Simoniz and restore the surface by polishing.

In my experience, the same package of prints can be sent to between three and five domestic salons in a single year, providing the prints are not damaged. Two to three mailings to foreign salons is about all that can be depended on. I used as many as 15 copies of one print and 12 copies of another, and at times they would all be out. Entry fees with few exceptions were \$1 and the average cost of domestic postage paid was 47 cents. Foreign mailings averaged about the same, the higher mailing rates being offset by the fact that the prints were sent unmounted and the packages were therefore smaller and lighter.

It was a real treat to see all the catalogs. In my opinion, the foreign judges were entirely adequate and fair to American prints, although I think they are a bit tighter in judging. It was my intention to send to all the salons but a few escaped my notice or, being out of town, I failed to get the prints in the mail on time. On the whole I found that salon committees handle the prints with considerable care but there is still much room for improvement.

There is nothing that will make an exhibitor more incensed than to receive back a mailing of ruined prints especially if he knows that his wrappings were adequate. Never again to that salon is the inevitable decision. The majority of prints I send out come back in good condition but I use the one-inch heavy mailing-cases so that damage is invariably not due to transportation. It might be wise for those who conduct salons to investigate the experiences of contributors who have been through the wringer.

A first-place winner in a P.S.A. Continental Print Contest, the original negative was taken near Mexico City and this print made from a subsequent paper negative. This scores well in the salons.

MAID OF THE RANCHO





SAN MIGUEL

This has had a wide acceptance and has been frequently reproduced in salon catalogs. It is a straight print, the negative made in San Miguel de Allende, a Mexican city off the beaten tourist path. The viewpoint and composition are impressive, the posing candid.

Cecil Atwater closes this series with

A Suggestion on Salons

What is the future of salon exhibiting? With no organization sponsoring them the salons over a considerable number of years have become stabilized and well organized. This is a rather remarkable achievement when it is realized that the movement is world-wide. Unfortunately some of the photographic clan differ in their understanding of the purposes of salons. It would be interesting if all those who are critical would tell us specifically what kind of pictures, in their opinion, should be accepted. Without question, there would be little unity of opinion.

I have discussed this subject with some who claim that salons are in a rut, that the pictures displayed have little significance and year after year follow the same pattern. When pressed to tell what kind of pictures they think should be accepted the replies are so general that interpretation is difficult. One claims that the salons are too "arty" with too many romantic landscapes, pattern pictures and abstractions. Another claims there are too many human interest pictures and that the pictures having artistic merit do not have much of a chance. There you

have it! The critics attack from opposite sides and completely disagree.

The senior Senator Henry Cabot Lodge, an astute politician if there ever was one, once said that he usually knew he was taking a sound position on a measure when he was criticized by opposite sides. My conclusion is that while the salons can doubtless be improved and will as time goes on, their critics are merely "agin" and are offering nothing as a substitute.

Constructive (?) View

Once I participated in a long discussion with a very well known photographer who is famous for superb print quality, his prints seldom exceeding 8x10 in size. After he had roundly condemned present day salons, I asked him to say what kind of pictures he believed juries should accept and he replied, "The kind of pictures I make." I cannot imagine anything more monotonous to view than a salon of 200 or more prints made by this admittedly famous photographer. Technical quality tops, subject matter uninteresting, composition inadequate.

Some critics, one a very big name in photography, want us to devote ourselves exclusively to taking snapshots of the "world as we find it." His group leans toward candid shots, usually of the seamy side of life—the more sordid the better, apparently—forgetting that there are many beautiful things in life that are worth recording. Some of the magazines, judging by their illustrations, appear to believe that the worse a picture is technically the more artistic it is. When we turn their pages and find picture after picture in which the subject is poorly lighted, out of focus and badly arranged, the only possible justification for its publication would have to be the depiction of some world shattering event. Yet what do we find? A subject that makes us wonder what possibly could have tempted the photographer to waste his film and paper. I wonder who's kidding whom!

Please believe me when I say that I am very appreciative of the place of the camera as a reporting medium. One of the most thrilling exhibits I have ever seen was that entitled "The Exact Instant," displayed in the Museum of Modern Art in New York. Most of the major events of the past century were shown through the eye of the camera. Obviously no claim was made of artistic merit. Personally, I

would welcome more exhibits of this kind open to all photographers.

What we call salons serve an entirely different purpose. They offer to the amateur photographer and others who care to participate an opportunity for evaluation and recognition of the kind of pictures he likes to make. In spite of the hopes of thousands of aspiring contributors, the number of prints produced that might be considered works of art are relatively few. But is this not also true of contemporary exhibits of paintings? How many do you think will have lasting importance?

The galleries are glutted with mediocrity. It is my belief that those who judge photographic salons admit a much smaller percentage of really poor pictures than do those who are entrusted with the selection of the efforts of the wielders of the brush.

The Worcester Art Museum, probably next to the Museum of Fine Arts in Boston, is New England's most important museum. A few years ago, it

put this subject of pictorial vs. documentary photography to the test in a very interesting way. The museum secured two exhibits, one a carefully assembled and excellent collection of prints loaned by the Museum of Modern Art, New York, and the other a collection of prints representing the work of about an equal number of successful salon exhibitors. The prints in the documentary group were in most cases the work of world famous photographers.

The two exhibits were displayed in two galleries of equal size and importance. The opening night was publicly advertised and was attended by perhaps 500 or 600 people. Both exhibits were undoubtedly viewed by all visitors. It was clearly evident before the evening was over that the prints made by the pictorialists had attracted much more attention than those of the documentarians.

Apparently the large majority of those who attended spent but a short time with and were not very interested



TULIPS

Flower studies are accepted by juries only after scrutiny, for the photographer controls all factors—subject, composition, lighting.

in the documentary prints. Most of their visit was devoted to viewing the group of—shall we say—salon prints. The one gallery was well filled all the time, the other, except initially, was scantily attended. Most of those present read the labels and studied the prints as I did but when they had completed the circuit of the documentary prints they evidently had no desire to see the prints again. Much more time was devoted to the pictorial prints.

It is my opinion that the vast majority of advanced amateur photographers and camera club members, of which latter there are many, many thousands, are favorable to continuing the salons substantially as they are now run. Since there are others who favor exhibits of the documentary type pictures, may I suggest that instead of beating themselves against the established institution known as salon exhibiting, which has proved over many years to be but a futile effort, they devote their time and enthusiasm to organizing exhibitions of documentary photography or whatever kind of photography they have their hearts set on, the prints to be judged, of course, by those sympathetic to the nature of the exhibition.

Personally, I hope very much this will be done. I have some documentary prints that I would like very much to submit so that I can find out whether or not they have merit.

"Good Manners" for Salon Committees

1. Broken corners are usually the result of dropping prints. A badly designed easel can be the fault.

2. When the surfaces of prints are badly scuffed, I suspect that the prints have been put in large piles which means a great weight on those near the bottom of the pile. When a considerable number of prints are removed from a pile, they are scraped against one another under considerable pressure. The use of heavy black or color crayons or heavily inked rubber stamps on the back of prints often results in a blemish on the surface of an adjoining print. Stickers with raised letters will scratch the surface of prints below them in the pile.

3. Handling prints with dirty and perspiring fingers results in blemished mounts. Some committees insist that those who handle prints do so with white cotton gloves—an excellent idea.

4. The hanging of prints in exceedingly hot rooms or where the sun strikes them directly or through glass, or the placement of prints on the wall over radiators all cause prints to warp and become detached from their mounts.

5. Holding a print in one hand near a corner will sometimes cause an actual break in the emulsion and the mount.

6. Opening paper-wrapped packages with a sharp knife has been the cause of a slashed print.

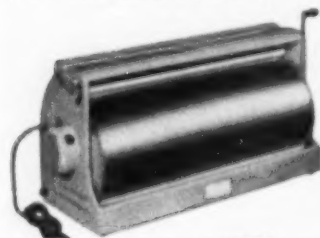
7. The storage of prints before and after the salon in a dusty and dirty room is another source of blemished prints and mounts.

8. Prints whenever possible should be displayed under glass.

DRY PRINTS THE EASY WAY

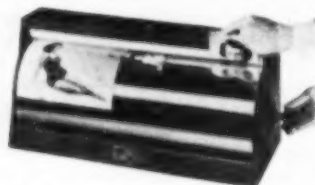
The only drum-type dryers at anywhere near their low prices, Lott Roto-Dryers dry matte or glossy prints flat and smooth in jig time. Superfinished stainless steel drying surfaces outwear (and out-perform) plated materials. Unique all-over heating elements distribute heat evenly, maintain constant temperature—prints can't scorch when you forget them.

Heating elements on all Lott dryers guaranteed for five years.



**LOTT
ROTOMASTER \$49.50**
(Fed. tax incl.)

23" x 28" drying surface, built-in rubber squeegee roller, two-heat temperature control.



**LOTT
PROFESSIONAL \$39.50**
(Fed. tax incl.)

23" x 28" drying surface.

**LOTT STANDARD (not shown),
12" x 28" drying surface, \$29.50**
(with tax)

GET A LOTT FOR YOUR MONEY

LOTT

MANUFACTURING CO.
210 Parker Avenue • Jamestown, N. Y.

BOOK REVIEWS

THE TECHNIQUE OF FASHION ILLUSTRATION, *Barney Abrams, Harper and Brothers, New York, 1950.*

For the beginner in fashion and advertising illustration, there are almost no guide-posts. The "hard way" is the only way to learn the techniques and the requirements. Every guide which hints at the lessons to be learned is valuable for this reason alone. Mr. Abrams's book is primarily concerned with the problem from the viewpoint of the designer of the advertisement and the section on photography concerns the use of pictures as elements in the design of the lay-out.

Even from this reverse aspect, there is much to be learned from the book. It hints at the reasons why the sometimes impossible requirements for an illustrative photograph are decreed and may give the cameraman a little more understanding and sympathy with the problems on the other side of the fence.

There is a wide opening, still, for a book which will be of practical help to the beginning illustrator. In default of that, this book will be useful to many.

FILTERS AND LENS ATTACHMENTS, *Eastman Kodak Data Book, Rochester, 1950, 50c.*

A new and rearranged presentation of the facts the photographer needs to know on this subject, presented with the usual clarity and good format which characterizes all the Eastman Data Books.

COLOURS AND HOW WE SEE THEM, *H. Hartridge, British Book Centre, Inc., New York, 1950, \$3.50.*

The manuscript for this was reworked from the Christmas Lectures

Dr. Hartridge delivered at the Royal Institution several years ago. These annual lectures are delivered to a youthful audience, and so this book is non-technical and skips a great deal of theory. It can still be read with much profit by an adult audience which is without the necessary physics and mathematics to follow the available material in this field.

The author speaks with authority since he is director of the Vision Research Unit of the (English) Medical Research Council. It is amazing how painlessly he can convey and demonstrate fundamental facts about color so they become part of one's useful knowledge.

23 BASIC STEPS TO BETTER MOVIES, *Lars Moe, Ver Halen Publications, Los Angeles, 1950, \$1.*

This is a primer of good movie techniques, taking the reader step-by-step through setting up scenes, continuity, timing, scripts and simple tricks. A good dollar's worth.

PRACTICAL PHOTOGRAPHY, *Robert A. McCoy, McKnight and McKnight, Bloomington, Ill., 1950, \$4.*

Designed as a text for a high school course, this volume deals with a practical method of solving each step in the development of techniques. The presentation is interesting and the procedures suggested are sound; its one weakness is an almost complete lack of technical information.

Modern education seems to demand that teaching materials be so designed that they entertain the student and sugarcoat the bitter necessity of occasional thinking.

However, this book stands almost alone in its field, other texts being designed for a more technically-minded group. It may stimulate more early photographic courses now that the information is organized in this form. Within the bounds of formal education, almost all that is currently available to the student are courses organized under college physics departments which, of necessity, emphasize the scientific at the expense of the artistic.

This book could not only serve as a text for improved courses, but will be of value to any amateur.

If you should like to add any of the books reviewed in these columns to your personal photographic library, write to Book Department, American Photography. This publication has either been authorized to distribute these books or will forward your order to the proper organization. Address:

Book Department,
AMERICAN PHOTOGRAPHY
421 Fifth Avenue South
Minneapolis 15, Minnesota

Salons

Camera Club Slide Competition, Color Division, P.S.A. Entry fee, \$4 for P.S.A. clubs, \$6 for non-P.S.A. clubs. Contest months are October, December, February, April and June. Deadline for entries is the 20th of each month. Each club may enter 6 slides each month (but no more than 2 from any individual). Contest Director, Merle S. Ewell, 1422 W. 48th St., Los Angeles 62, Calif.

10th Annual Exhibit of Nature Photography, Kentucky Society of Natural History, Ohio Falls Chapter. Closes Nov. 6. Four prints and/or four transparencies, \$1 each ent. Chairman: Kent Previetto, 2220 Highland Ave., Louisville 4, Ky.

24th Annual International Exhibition of Photography, Lincoln Camera Club. Closes Nov. 11. Five classes: pictorial; architectural; scientific and record; natural history; monochrome slides; color slides. Four pictorial prints, other classes unlimited number prints; six slides maximum. \$1 entry fee. The Exhibition Committee, 2 Mint St., Lincoln, England.

Conshohocken Camera Club Annual Exhibit. Entry fee \$1 for four prints, closes Nov. 15. Contact George W. Norcross, General Delivery, Conshohocken, Penna.

13th Springfield International Salon of Photography. Closes Dec. 4. Four prints, \$1. Address: Salon Secretary, Springfield International Salon of Photography, The George Walter Vincent Smith Art Museum, Springfield 5, Mass.

4th Cuban International Exhibition of Photography and Color Slides, Club Fotografico de Cuba. Closes Dec. 5. Four prints and/or four slides (up to 3x4 1/4). \$1 each section. Print information from St. Benjamin Rodriguez Delfin, Club Fotografico de Cuba, O'Reilly y Compostela, altos, Habana, Cuba. For slides: St. Dagoberto Villar Puente, same address.

16th International Salon of Photography, Des Moines Y.M.C.A. Movie and Camera Club. Closes Dec. 9. Entry fee, \$2. Contact Des Moines Y.M.C.A. Movie and Camera Club, Y.M.C.A. Bldg., Des Moines, Ia.

10th Lucknow International Salon of Photography, United Provinces Amateur Photographic Association, Lucknow, India. Closes Dec. 15. Two sections: Monochrome prints; Color prints and slides. \$1 each section. Secretary, U.P. Amateur Photographic Association, 10 Cantonment Road, Lucknow, India.

18th Wilmington International Salon of Photography, Delaware Camera Club. Closes Jan. 14, 1951. Four prints, \$1. M. M. Wainwright, Chairman, P.O. Box 401, Wilmington, Del.

8th Great Falls Salon of Photography, Great Falls Camera Club, Montana. Closes Feb. 10, 1951. Four prints, \$1. Miss Elwis Cahalan, Box 1997, Great Falls, Mont.

6th Chicago International Exhibition of Nature Photography, Nature Camera Club of Chicago. Four prints, four slides. Entry fee, \$1. H. J. Johnson, 2134 Concord, Chicago, Ill.

FREE
Bargain Book

Packed with hundreds of sensational bargains—new and used—in still and movie photo equipment and accessories. Write for your free copy today to:

Central Camera Co.
Dept. 136, 330 S. Wabash, Chicago 4, Ill.

Photographic Headquarters Since 1899

CLASSIFIED ADVERTISING

Retos: 10c per word prepaid, 5% discount for 6 consecutive insertions. Each item, including name and address, counts as one word. Monitors in a series count as one word (i.e., \$12 White St., counts three words—4 for \$1.00, counts as three words). Zone numbers free. Ads received by 15th of each month will appear in second following issue. Mail to CLASSIFIED AD DEPT., AMERICAN PHOTOGRAPHY, 421 Fifth Avenue So., Minneapolis 15, Minnesota.

CAMERAS

KALART camera, new, unused, complete, \$109.50. David Rhoads, Bellingham, Wash.
GARY CAMERA, 619 Washington, Gary, Indiana, may have what you want. Visit or write us. Dealers with Ansco, Bell & Howell, Eastman, Graflex, Leica, Realist, etc. Open Sundays and Holidays 10 to 2.

INSTRUCTIONS

PHOTOGRAPHY for pleasure or profit. Learn at home. Practical basic training. Long established school. Write for free booklet. American School of Photography, 1315 Michigan, Dept. 308C, Chicago 5, Illinois.

MOVIES

FANTASTIC BUT TRUE . . . 3 dimensional 16mm home movies. They work in your existing movie projector. Send \$1.00 for 6 ft. sample strip (this dollar applies to purchase of full movie later) & catalog. Warner-Cosley Productions, Inc., 6356 Hollywood Blvd., Hollywood 28, Calif.

CARLSBAD CAVERNS, The Antarctic, Pitcairn Island, others. 8mm 16mm Home Movie Travels. Carlsbad Caverns sample color film \$1.50 specify 8mm 16mm. Catalogue Sc. "TEX" HELM, Dept. APM, Carlsbad, N.M.

MOST complete listing of sports, comedies, travel, musicals, westerns, cartoons, etc. Catalog 16c. Turke Films, Hinsdale 3, Illinois.

OIL COLORING

OIL COLORING photographs can be a fascinating hobby or profitable sideline for those with artistic talent. Learn at home. Easy simplified method. Send for free booklet. National Photo Coloring School, 1315 Michigan, Dept. 308C, Chicago 5, Illinois.

PRINTING

CONTROLLED Processing, 1/2 cent foot, 8-8mm, 16mm. Spools returned. St. Louis Cine-Graphic Arts, 209 Thomas, Kirkwood 22, St. Louis, Mo.
QUALITY WORK, PROMPT DELIVERY. 2x2 slides from any size negatives 15c. Thomas Chang, Box 941, Lincoln, Nebraska.

NO Negative? Send \$1.00 for new negative and two 3x7 enlargements from picture, transparency, colorprint. On Movie frames two 4x5 enlargements or one colorprint. Carliphoto, 1187 Jerome Ave., New York 52, N.Y.
FREE mailers! We take all possible care with your film. Fine grain developed—vaporated—fade-proof! Only \$1.25 for 36 exposures, 85c for 20. Send film or write today. Post Photo Service, Dept. C-3, 475 Fifth Avenue, New York 17, New York.

HEINE PHOTO COMPANY, 9 Union Square West, Dept. A-1, N.Y. 2, N.Y. Black & White and color finishing of supreme quality. Write for price list and mailing bag. Send negative for free 4x5 enlargement.

REPAIRS

48 Hour Precision Camera Repair Service on everything, still and cine, in a most completely equipped laboratory. All timing by electronic devices and all work guaranteed. "You send it, we'll repair it." The Mulla Photographic Engineering Laboratory, 1857 N. Western Ave., Dept. AMP, Hollywood 37, Calif.

RETOUCHING

RETOUCHING, etching, dyeing. Quality work. G. W. Piper, 2448 N. Artesian Ave., Chicago 47, Illinois.

SLIDES

ALASKA'S FINEST COLORSLIDES. Scenery, Nature, Wildlife. Free list. Robert A. Hall, Moose Pass, Alaska.

STEREO REALIST COLOR SLIDES CARLSBAD CAVERNS, Old Mexico, Desert Flowers, others. Sample 75c. Catalogue Sc. "TEX" HELM, Dept. APS, Carlsbad, N.M.

TRAVELS IN WONDERLAND. Breathtaking color and beauty never before filmed. 2x2 eight \$1.95. Three samples, literature \$1.00. Daulers, Reston, Dave Harris, 2401 Pittsburgh, El Paso, Texas.

SLIDE OF THE MONTH . . . offers for your approval a new selection of 2"x2" color slides each month. The best in quality and subject material embracing the field of scenic, travel, educational, and nature photography. . . . No "Arts." Also Stereo Slide of the Month Club for Stereo Enthusiasts. Membership FREE, no dues. Write for free booklet. PACIFIC COLOR SLIDE CO., 1748 Westwood Blvd., Los Angeles 24, Calif.

50,000 SLIDES in stock covering Germany to Hong Kong, Quebec to Panama, insure prompt shipment. Bermuda, England, France, Germany now available as well as many Historic Mansions. 96% repeat orders indicate Relac slides produced by Captain M. W. Arps, U.S. Navy, retired, give satisfaction. Catalog 3c. Relac, Box 1715, Washington 13, D.C.

STEREO Realist, original Kodachrome slides. \$1.50 each. Dealers inquiries invited. Artists Inc., Box 1204, San Francisco 8, Calif., Dept. 3.

SAN FRANCISCO FAIR '39, '40. The color beauty of memorable TREASURE ISLAND in 2x2 slides. Five famous views—day and night—\$2.00. Travel and Lecture Slides, 3941 Sacramento St., San Francisco 18, Calif.

CARLSBAD CAVERNS. New issue interior color slides. Sample 50c. Catalogue Sc. "TEX" HELM, Dept. APS, Carlsbad, N.M.

COLOR SLIDES. Post-war Germany Landscapes, butterflies, wild flowers of Indiana. Free list. Slides 40c. Bryan Allen, 2715 Beverly, Gary, Ind.

BELIEVE IT OR NOT! 2x2 Stereo Slides for screen projection in your existing 2x2 slide projector. Send 25c for sample stereo slide & catalog (request item A). Warner-Cosley Productions, Inc., 6356 Hollywood Blvd., Hollywood 28, Calif.

VACATION COLORSLIDES, national parks, Southwest, travel, science. Free list (with sample 30c). Kelly E. Chado, Box 5, Los Alamos, New Mexico.

MISCELLANEOUS

IT's her! Your hostess. Best quality developing and printing service. Only \$1.25 for 36 exposures, 85c for 20; 30c for 8. Send film or write today for free mailers. Post Photo Service, Dept. B-2, 475 Fifth Avenue, New York City.

PRINTING, standard forms, invoices, business cards, letterheads, etc., lowest cost, anywhere in U.S. Catalog on request. Commission salesman also needed. Arrow Press, 513 4th Avenue So., Minneapolis 15, Minn.

MISSIONE SOFT-SHARP SCREENS, No. 1 (1 1/2 inch aperture) at \$1.90. A few left. American Photographic Publishing Co., 421 9th Avenue So., Minneapolis.

EDITORIAL BRIEFS

"There are three difficulties to authorship: to write anything worth the publishing—to find honest men to publish it—and to get sensible men to read it."—C. C. Colton, 1820.

Here are the men who surmounted the first obstacle so that AMERICAN PHOTOGRAPHY was pleased to substitute as a solution for the second. You make up the third group. Now that the circle is completed, let us introduce you to this month's authors.

Our lead article this month, on selecting electronic flash equipment to fit your requirements, is by *Andrew F. Henninger*, who is president of the Anglo Corporation of Chicago which supplies tubes for many makes of equipment as well as manufacturing several outfits under its own patents. Mr. Henninger's daily mail includes an astonishing number of questions from users of this equipment throughout the world. In the process of patiently answering these, he has become one of the country's outstanding authorities on the subject. We in the editorial office are also looking forward to the future articles in the series he has promised us.

Our coverage of the Milwaukee Show is a double one, with independent reports from *Arthur Siegel*, who is well-known for his own outstanding photography and who was one of the judges of the show, and from *Axel Bahnsen*, of Yellow Springs, Ohio, who usually turns up wherever anything of photographic interest is happening. Our readers will remember Axel's review of the salons in our September issue. He will be in our pages again in the future.

Roland Wolfe, who tells how he has adapted his equipment for panoramic views, has been doing illustrated articles for a number of years, hitting editors, as he says, "with the right thing at the right time." Construction is his hobby and he is now faced by the hard choice "to hire a warehouse or chuck the handcraft." Many readers will appreciate his dilemma. We have more articles by Mr. Wolfe at hand and you will be seeing more of them in the future.

Nicholas Ház, who continues his series on color on page 54, is known

to thousands through his books and his famous course on Image Management. *Cecil B. Atwater* is one of the best-known names among salon contributors and judges.

Here is a group of workers you will be proud to entertain in your living-room as you read this month's issue.

PAA Convention Highlights

The annual convention of the Photographers Association of America was smaller than usual this year. Part of the cause may well be the period of reorganization the association is undergoing at present. There are signs that the change is being successfully accomplished and that the organization will continue to grow. This is fortunate, because the Association serves a real purpose and all photography is the better for its existence.

The convention was well worth attending, as it always is, not only for

FIFTY YEARS AGO

We are among the few—getting fewer, alas! day by day—who, through long and careful practice, acquired the knack, or art, or by whatever name it may be called, of feeling what should be the correct exposure under almost all conditions; and knowing its value, were inclined to discourage the use of a meter or any other kind of aid, on the ground that he who walks on crutches will never learn to walk without them. But conditions change with time, and as those who will take the time and trouble to thus acquire the desirable faculty are few compared with the many who will not, it is probably, on the whole, better to encourage the use of a reliable method—even though it involves a little trouble for each exposure—than to trust to guess-work.

There are many methods, and several instruments on the market, all of either of which may lead to more or less fairly accurate timing of exposures; but that with which we are best acquainted is the Wynne's Infallible Exposure Meter. It, as is well known, depends for its action on a means of measuring the actinism of light at the time of exposure and it is so arranged that all the necessary calculations are made by the simple turning of a glass disk.

***—The American Amateur Photographer, Nov., 1900.

the chance to meet old friends and make new ones, but for the manufacturer's exhibits and the demonstrations of practical techniques. Outstanding on the program was the dramatized portrait sitting shown by the Canadian, John Steele. Steele has had the rare courage to force his sitters to accept good work and you will hear more about him in the future.

The picture exhibit, unfortunately, featured the same conservative stuff that the studios consider it financially necessary to grind out for popular taste. The invitation show hung by the P.S.A. at the convention was much more stimulating and interesting. For sheer vigor and imagination, all the other prints were over-shadowed by the small collection shown by Richard Avedon. In the little alcove assigned to him, photography was demonstrated as an independent art-form.

The manufacturers had little new to offer this year, except for Kodak's promise of an Ektacolor Print Film, a transparency material for making copies from Ektacolor negatives. This would seem a logical transition step toward some future color paper to be printed from Ektacolor.

Kodak also showed a new color notebook with four new data books. We will carry a full review of this next month.

Looking to the Future

Speaking of next month, we will feature portraiture, with three fine articles. There will be much else of interest, as well as the usual departments. The future will bring more material on electronic flash, now exhibiting a run-away popularity with units reasonably priced and dependable. Articles on their practical use and a complete course in how to build them are in the offing.

Further into the future, there is a notable January issue in the building—one which will remain on your library shelves for years. Also, a complete review of exposure problems and a survey of all the available exposure meters.

You'll want to watch the stands for each new issue. Better yet—take advantage of our present rates and send in your subscription.

★ **photographers'**
choice . . . ★
 ★ **because**
IT IS FACTUAL!

1951 ★
EDITION

NO PHOTOGRAPHIC LIBRARY can be considered complete without the current issue of America's oldest photographic annual—THE AMERICAN ANNUAL OF PHOTOGRAPHY. Consistently for 65 years it has given workers the kind of factual information that has improved their photo-technique. You'll find a treasury of the same type of articles in the new 1951 edition plus the usual galaxy of outstanding prints for your study.

240 pages, 7¼ x 9¾

Cloth Cover \$4.00

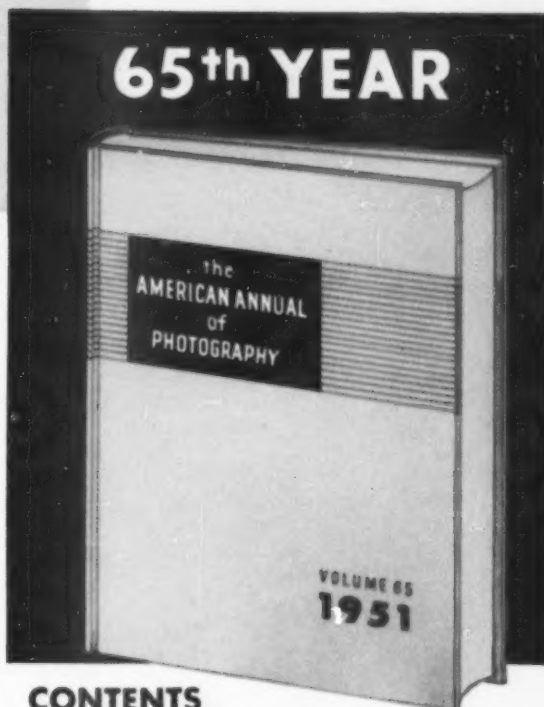
Paper Cover \$3.00

THE AMERICAN ANNUAL OF PHOTOGRAPHY

edited by

Franklin I. Jordan, FPSA, FRPS

65th YEAR



CONTENTS

PHOTOGRAPHY AS AN AVOCATION, *Dr. Max Thorek*, dean pictorialist, reflects on his record of more than 4000 salon acceptances and tells how those great pictures were made. 16 illustrations.

CINEMATOGRAPHY AS A GRAPHIC ART, *Peyton M. Stollings*, production manager of educational films of the University of Minnesota makes a plea for elevating movies to a unique and unfilled art niche.

HYDROGEN ION CONCENTRATION, *Allen R. Greenleaf*, photo-chemical expert, deals in very simple language (in spite of the title) with the importance of relative acidity of photographic solutions.

PLUS PICTURES IN THE FOG, by *Jack Wright*; PHOTOGRAPHY AND CRIMINALISTICS, by *C. E. O'Hara and J. W. Osterberg*; MARINE PHOTOGRAPHY, by *J. R. Hogan*; PHOTOGRAPHY IN MOONLIGHT, by *G. A. Cloud*; MASKING CORRECTION, by *E. M. Symes*; PHOTOGRAPHY SPEAKS IN COLLEGE RESEARCH, by *Albert B. Christman*; DOWN ON THE FARM, by *Georgia Engelhard*; USING THE SWING BACK, by *F. W. Dettley* . . . and over 64 PICTORIAL ILLUSTRATIONS with cogent commentary by *Franklin I. "Pop" Jordan*, the editor. And, of course, WHO'S WHO IN PICTORIAL PHOTOGRAPHY, the statistical tabulation of your salon activities.

**Order Through Your Local Book or Camera Store
 or Directly from American Photography**

Book Department

AMERICAN PHOTOGRAPHY

421 Fifth Ave. S., Minneapolis 15, Minn.

Gentlemen: Please rush a copy of THE 1951
 AMERICAN ANNUAL OF PHOTOGRAPHY to:

Name

Address

City State

☐ Cloth Cover @ \$4.00 ☐ Paper Cover @ \$3.00

Got it!

**ALL OF IT...the subtleties as well as
the shouting colors...**



You know how it goes. The subject delighted you, so out came your camera. You used care and judgment, and gave the picture the signature of your personality.

Then . . . while the film was being processed . . . you were beset by unhappy doubts.

But when the little yellow box came in and you took your first, fast look . . . there it was. You *had* it.

Whether you use Kodachrome or Kodacolor or Kodak Ektachrome Film, the joy of achievement is built-in.

**Eastman Kodak Company
Rochester 4, N. Y.**

Kodak
TRADE-MARK

